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Governor

SHAN S. TSUTSUI
Lt. Governor



SCOTT E. ENRIGHT
Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
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**TESTIMONY OF SCOTT E. ENRIGHT
CHAIRPERSON, BOARD OF AGRICULTURE**

BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

March 3, 2015

9:05 A.M.

CONFERENCE ROOM 211

**SENATE BILL NO. 1037 SD 1
RELATING TO THE HEALTH IMPACT OF PESTICIDES**

Chairpersons Tokuda and Members of the Committee:

The Department of Agriculture (HDOA or Department) has strong reservations about SB 1037 SD 1 in that it refers to the Department of Health to be the responsible agency to establish and administer a program relating to disclosure of pesticide use by any person or entity.

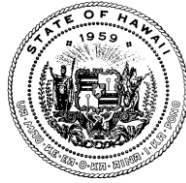
We feel that it is the purview of the HDOA to regulate the use of pesticides under the Hawaii Pesticides Law, Chapter 149-A. Also to note that the cost to staff and maintain such a data bank would be a costly proposition with currently limited state funds.

The HDOA would like to identify that some of the reporting requirements that may be problematic due to it possibly being considered confidential business information (CBI) by registrants. The bill's requirement for monthly reporting of all pesticides in accordance with this bill for public posting will necessitate the hiring of additional Department staff to handle and maintain this reporting activity.

In summary, the Department would like to point out that language in SB 1037 SD 1 seems to target a segment of the farming community. The Department supports all agricultural activity that is being conducted in accordance, with federal, state and county regulations.

Thank you for the opportunity to present testimony.





STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. Box 3378
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Testimony COMMENTING on with Reservations S.B. 1037, S.D.1
Relating to the Health Impacts of Pesticides

SENATOR JILL N. TOKUDA, CHAIR
SENATE COMMITTEE ON WAYS AND MEANS

Hearing Date: **March 3, 2015**
9:05 am

Room Number: 211

- 1 **Fiscal Implications:** Unknown, but significant.
- 2 **Department Testimony:** S.B. 1037 S.D. 1 seeks to amend H.R.S. Chapter 321. The Hawaii
- 3 Department of Health (DOH) would like to offer the following comments with reservations
- 4 regarding this proposed measure.
- 5 S.B.1037 S.D.1 asks the DOH to establish and administer a program relating to the mandatory
- 6 disclosure of pesticide use by any person or entity that cultivates crops on 200 or more acres
- 7 under certain circumstances. DOH supports science-based public health actions to protect the
- 8 health of our children. In this regard over the past two years, DOH has prepared a report on
- 9 atrazine occurrence in Hawaii for the Legislature, conducted stream sampling across the State for
- 10 hundreds of currently used pesticides and coordinated a cancer cluster evaluation for Kauai with
- 11 the University of Hawaii. DOH is also continuing to build laboratory capacity for pesticides so
- 12 that more environmental sampling can be done to evaluate offsite movement of pesticides in air,
- 13 drinking water, our streams and coastlines. We have conducted these efforts in close
- 14 collaboration with state agencies, such as the Hawaii Department of Agriculture (DOA), federal
- 15 agencies, and county governments.
- 16 DOH supports the disclosure and notification approach taken by the Kauai Agricultural Good
- 17 Neighbor Program, a voluntary pesticide-use disclosure program on Kauai that provides monthly
- 18 on-line reports of restricted pesticide use through the DOA website, a 100 foot buffer zone
- 19 between pesticide application and sensitive communities and pre-application notification to
- 20 neighboring property owners upon request. S.B.1037 S.D.1 asks DOH to establish and
- 21 administer a program mandating pesticide use disclosure requirements, and further requires that
- 22 DOH post a monthly summary of each required disclosure report and any failures to disclose.

1 DOH does not regulate use and application of pesticides, or possess the necessary agricultural
2 and pest management expertise to establish, implement and enforce mandatory pesticide use
3 disclosure requirements. In addition, DOH does not have existing positions or infrastructure to
4 establish a pesticide use reporting and public disclosure program. Establishing these functions at
5 DOH would be duplicative, requires establishment of a new program within the Department and
6 could cause confusion for pesticide applicators who have other regulatory reporting requirements
7 to DOA.

8 Mandatory pesticide use reporting and public disclosure are most efficiently implemented by
9 DOA Pesticides Branch which regulates the use, sale, and distribution of pesticides in the State
10 of Hawaii, and has expert staff providing oversight, applicator education, and enforcement of
11 proper pesticide use practices. In addition, DOA already provides monthly on line public
12 disclosure of voluntary pesticide use reporting under the Kauai Good Neighbor Program.

13 In summary, while DOH recognizes the public interest in disclosure and notification of pesticide
14 uses in local communities, such functions should be carried out at DOA.

15 Thank you for the opportunity to provide comments on this important measure.

COUNTY COUNCIL

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March 2, 2015

**TESTIMONY OF GARY L. HOOSER
COUNCILMEMBER, KAUAI COUNTY COUNCIL
ON**

SB 1037, SD 1, RELATING TO THE HEALTH IMPACTS OF PESTICIDES

Committee on Ways and Means

Tuesday, March 3, 2015

9:05 a.m.

Conference Room 211

Dear Chair Tokuda and Members of the Committee:

My name is Gary L. Hooser and I presently serve on the Kauai County Council. I am here today testifying as an individual Councilmember in support of SB 1037, SD 1 Relating to the Health Impacts of Pesticides, and to recommend the language be amended and strengthened to reflect the contents of SB 801, SD 1.

SB 1037, SD 1 requires the Department of Health to establish a mandatory disclosure of pesticide use program for all persons or entities who use pesticides under certain circumstances.

There is no question in terms of scientific studies that pesticides in general, but especially Restricted Use Pesticides, have the potential to cause great harm to health and the environment. Full disclosure is an essential element for regulating Restricted Use Pesticides, as without full disclosure the public is not able to avoid the areas being treated and they do not know when to shut their windows. When they seek medical attention for exposure to pesticide drift, the attending physician has no idea as to the impacts of the exposure as they do not know what chemicals were applied or when. It is without question that pesticides are harmful and they should not be applied in sensitive areas adjacent to homes, hospitals, schools, and waterways.

For the reasons stated above, I urge the Committee on Ways and Means to vote in full support of this measure with the recommended amendments. Should you have any questions, please feel free to contact me or Council Services Staff at (808) 241-4188.

Sincerely,

GARY L. HOOSER
Councilmember, Kauai County Council

AB:mn

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Elle Cochran	Maui County Council Member	Support	No

Comments: I strongly support this and ask that you pass it out of your committee with no amendments. Mahalo, Council Member Elle Cochran

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American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



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Sylvia R. Pager, MD, representing the American Academy of Pediatrics, Hawaii Chapter, presented the following testimony the morning of February 5th to the Hawaii House Committee on Energy and Environmental Protection.

Dr. Pager passed away on Sunday, February 8th following a severe stroke that occurred just after she testified at the state Legislature on Thursday.

To honor Dr. Pager's long-standing service and advocacy on behalf of Hawaii's pregnant women, breast-feeding mothers, and young children, the American Academy of Pediatrics, Hawaii Chapter will submit excerpts of her testimony for HB1514 to committee hearings on every bill related to disclosure, notification, and buffer zones of toxic, restricted use pesticides and to our concern about pesticide exposure that science demonstrates negatively impacts the health and well-being of Hawaii's keiki.

Mahalo for the opportunity to honor Dr. Pager in this way, ensuring the voice of the American Academy of Pediatrics, Hawaii Chapter continues to be heard throughout this legislative session.

Aloha,
R. Michael Hamilton, MD, MS, FAAP

Senate Committee on Ways & Means

Tuesday, March 3, 2015
9:05a, Conference Room 211

Honoring the life and work of Sylvia R. Pager, MD, MS, FAAP, FABM, IBCLC
Pediatrics Breastfeeding Medicine
Assoc. Clin. Prof., Dept. of Pediatrics
JABSOM, University of Hawaii
AAP Hawaii Chapter Breastfeeding Coordinator

TESTIMONY IN STRONG SUPPORT OF SB1037 – RELATING TO THE HEALTH IMPACT OF PESTICIDES

“Aloha Kakou”

“This bill requires that the state protect keiki and kupuna health by requiring disclosure, notification, and buffer zones of toxic restricted use pesticides around schools and nursing homes.”

“It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal,¹ neonatal,² and infant life can disrupt critical developmental processes.³ Early life pesticide exposure has been linked to long-term health effects including cancer,⁴ decreased cognitive function,^{5,6,7} behavior problems,^{8,9} birth defects and other adverse birth outcomes,^{10,11} and asthma.^{12”}

¹ Rull RP, Gunier R, Von Behren J, Hertz A, Crouse V, Buffler PA, and Reynolds P. 2009. Residential Proximity to Agricultural Pesticide Applications and Childhood Acute Lymphoblastic Leukemia. *Environmental Research*, 109(7): 891-899.

² Chevrier C, Limon G, Monfort C, Rouget F, Garlantezec R, Petit C, Durand G, and Cordier A. 2011. Urinary Biomarkers of Prenatal Atrazine Exposure and Adverse Birth Outcomes in the PELAGIE Birth Cohort. *Environmental Health Perspectives*, 119(7): 1034-1041.

³ Shelton, JF et al. 2014. Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides: The CHARGE Study. *Environmental Health Perspective*, 122(10): 1103-1110.

⁴ Infante-Rivard C, Labuda D, Krajinovic M, Sinnott D. 1999. Risk of childhood leukemia associated with exposure to pesticides and with gene polymorphisms. *Epidemiology* 10(5): 481-487.

⁵ Rauh V, Arunajadai S, Horton M, et al. 2011. Seven-year neurodevelopmental scores and prenatal exposure to chlorpyrifos, a common agricultural pesticide. *Environ Health Perspect*. 119(8): 1196–1201.

⁶ Bouchard MF, Chevrier J, Harley KG, et al. 2011. Prenatal exposure to organophosphate pesticides and IQ in 7-year-old children. *Environ Health Perspect*. 119(8): 1189–1195.

⁷ Engel SM, Wetmur J, Chen J, et al. 2011. Prenatal exposure to organophosphates, paraoxonase 1, and cognitive development in childhood. *Environ Health Perspect*. 119(8): 1182–1188.

⁸ Roberts EM, English PB, Grether JK, Windham GC, Somberg L, and Wolf C. 2007. Maternal Residence near Agricultural Pesticide Applications and Autism Spectrum Disorder among Children in the California Central Valley. *Environmental Health Perspectives*, 115(10): 1482-1489.

⁹ Bouchard MF, Bellinger DC, Wright RO, Weisskopf MG. 2010. Attention-deficit/hyperactivity disorder and urinary metabolites of organophosphate pesticides. *Pediatrics*. 125(6). Available at: www.pediatrics.org/cgi/content/full/125/6/e1270.

“The American Academy of Pediatrics (AAP) recently published a major report entitled “**Pesticide Exposure in Children**” that comprehensively reviewed 195 medical studies on the subject (see Roberts and Karr 2012). Among other impacts, chief concerns included:

- 1) **Childhood cancers:** Five of six recent case-control studies found a statistically significant relationship between pesticide exposure and leukemia. Two of the studies had the most detailed exposure assessment conducted to date, and found increasing risk with rising exposure, a strong indication that the observed associations are real. (see Roberts and Karr 2012, p. e1773-e1774; Infante-Rivard et al. 1999; Wigle et al. 2009, Monge et al. 2007; van Wijngaarden et al. 2003);
- 2) **Neurobehavioral and cognitive deficits:** Exposure to many pesticides causes acute neurological symptoms, such as headaches and dizziness. However, a spate of recent studies is building an irrefutable case that long-term, low-level exposure to organophosphate insecticides (OPs) in early life (particularly *in utero*) has profoundly negative impacts on children’s neurological development;
- 3) **Adverse birth outcomes:** The American Academy of Pediatrics is also concerned about the role of pesticides in triggering adverse birth outcomes including preterm birth, low birth weight, and congenital anomalies (see Roberts and Karr 2012, e1776-e1778).
- 4) **Asthma:** Asthma is the most common, chronic noninfectious disease of childhood, and is estimated to affect 300 million people worldwide, causing a quarter of a million deaths each year (Strina et al. 2014). Asthma is characterized by intermittent breathing difficulty, including chest tightness, wheezing, cough and shortness of breath. There have been few studies of pesticides and asthma in children, but those conducted raise serious concerns.

Health Harms Specifically Linked to Pesticide Drift

“The medical studies discussed above address the harms of pesticides from a variety of exposure pathways: food, water, dermal contact, inhalation and/or drift. Below, we discuss studies that specifically address health outcomes where drift is the presumed exposure pathway.

¹⁰ Garry VF, Harkins ME, Erickson LL, Long-Simpson LK et al. 2002. Birth Defects, Season of Conception, and Sex of Children Born to Pesticide Applicators Living in the Red River Valley of Minnesota, USA. *Environmental Health Perspectives* 110 (Suppl. 3): 441-449.

¹¹ Garry VF, Harkins ME, Erickson LL, Long-Simpson LK et al. 2002. Birth Defects, Season of Conception, and Sex of Children Born to Pesticide Applicators Living in the Red River Valley of Minnesota, USA. *Environmental Health Perspectives* 110 (Suppl. 3): 441-449.

¹² Salam MT, Li YF, Langholz B, Gilliland FD; Children’s Health Study. 2004. Early-life environmental risk factors for asthma: findings from the Children’s Health Study. *Environ Health Perspect.* 112(6): 760–765.

A growing body of research supports the proposition that living near pesticide-sprayed fields increases the risks of a number of serious diseases, and exposure via pesticide drift is the only logical explanation. Many of these studies have been conducted in California, which has an extremely fine-grained pesticide reporting system that provides precise information on which pesticides are sprayed near any given community, when, and in what amounts.

Epidemiological studies based on this information have made some troubling findings. For instance, Costello et al. (2009) have found that **exposure to paraquat and maneb within 500 meters of the home increased the risk of Parkinson's disease by 75%, with those under 60 years of age at higher risk.**"

Autism

"Roberts et al. (2007) conducted an analysis, which found that **expectant mothers residing within 500 meters of fields sprayed with organochlorine insecticides (e.g. dicofol and endosulfan) during early pregnancy had a six-fold higher risk of bearing children with autism spectrum disorder than mothers not living near such fields; this ASD risk declined with increasing distance from field sites and increased with rising application amounts.**

Shelton et al. (2014) found a 60% increased risk of autism spectrum disorder (ASD) in children of mothers who lived near fields sprayed with organophosphate insecticides at some point during their pregnancies, with much higher risk when exposure occurred in the second trimester of their pregnancies. Similarly increased risk – for both ASD and developmental delay – was found for children of mothers near fields treated with pyrethroid insecticides just prior to conception or during their third trimester. Proximity to carbamate-treated fields was also linked to higher risk of developmental delay.

Several of the insecticides at issue in this California study are used on Kaua'i and likely on other islands as well: one of the three organophosphates (chlorpyrifos); four of the five pyrethroid insecticides – permethrin, lambda-cyhalothrin, cypermethrin and esfenvalerate; and one of the two carbamates (methomyl).

With at least 26 schools in Hawaii located within one mile of large agricultural companies, this is of grave concern."

Sylvia Pager punctuated her testimony by ending with: "The medical evidence is staggering and highly unnerving. As a doctor, it is my obligation to tend to the health of my community. I take this responsibility with great seriousness. I respectfully urge the committee members to take their role as policymakers with the same level of seriousness, and pass this measure to protect our keiki."

Mahalo for your work on these important issues.

Sincerely,

R. Michael Hamilton, MD, for the American Academy of Pediatrics, Hawaii Chapter, honoring life and work of Sylvia R. Pager, MD.

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Nomi Carmona	Babes Against Biotech	Support	Yes

Comments:

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SB1037

Submitted on: 2/27/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Nancy Redfeather	Hawaii Island School Garden Network	Support	No

Comments: The EPA has yet to establish allowable limits for children and pesticides in water, air, and food. Today, there is conclusive evidence that pesticide exposure and damage to cells in the mother is transferred to the child through epigenetics. Pesticides cause or exacerbate ADD, ADHD, and Autism. Exposure can cause long term health problems in children. We need to be more mindful of what we are exposing our communities to. this is our kuleana, to malama ka 'aina.

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Health Effects of 48 Commonly Used Toxic Pesticides in Schools

A Beyond Pesticides Fact Sheet

Pesticide	Cancer	Reproductive Effects	Neurotoxicity	Kidney / Liver Damage	Sensitizer / Irritant
Insecticide					
Acephate	C ¹	X ²	X ³	X ⁴	X ²
Allethrin			X ²	X ²	X ²
Avermectin		X ²	X ²		X ²
Bendiocarb		X ³	X ³		X ²
Bromacil	C ¹			X ²	X ⁵
Chlorpyrifos			X ²		X ²
Cyfluthrin		X ²	X ²	X ²	X ²
Cypermethrin	C ¹	X ⁶	X ²	X ²	
Diazinon		X ⁷	X ²		X ²
Dichlorvos	C ¹		X ²	X ²	X ²
Fenoxycarb	Likely ¹			X ²	X ²
Fenvalerate			X ²		X ²
Hydramethylnon	C ¹	X ⁸		X ²	X ²
Isophenfos			X ⁵		
Lamda Cyhalothrin	D ¹		X ²		X ²
Permethrin	C ¹	X ⁹	X ²	X ²	X ²
Phenothrin			X ¹⁰	X ³	
Piperonyl butoxide	C ¹	X ¹¹	X ¹¹	X ¹²	X ¹¹
Propetamphos			X ²		
Propoxur	B2 ⁵		X ²	X ²	
Pyrethrin	Likely ¹	X ²	X ²	X ²	X ²
Tetramethrin	C ¹		X ³		
Trichlorfon		X ²	X ²	X ²	X ²
Herbicides					
Atrazine	2B ¹³	X ⁷	X ²	X ²	X ²
Bensulide			X ²		X ²
2,4-D	2B ¹⁴	X ¹⁵	X ²	X ²	X ¹⁶
DSMA			X ¹⁷		X ¹⁷
Dacthal	C ¹			X ²	X ¹⁵
Dicamba	D ¹		X ²	X ²	X ²
Diquat Dibromide		X ¹⁸		X ²	X ⁵
Endothall				X ¹⁵	X ²
Glyphosate		X ¹⁵	X ¹⁵	X ²	X ⁵
Isoxaben	C ¹				
MCPA		X ²	X ¹⁵	X ¹⁵	
MCPP				X ²	X ²
MSMA		X ⁹	X ⁹	X ¹⁸	X ⁹
Pendimethalin	C ¹	X ¹⁵		X ²	X ²
Prometon	D ¹				X ¹⁹
Pronamide	B2 ¹	X ⁵		X ⁵	X ²
Siduron					X ⁹
Triclopyr	D ¹			X ²	X ²
Trifluralin	C ¹	X ⁷		X ²	X ²
Fungicides					

Benomyl	C ¹	X ⁸	X ¹⁵	X ²	X ²
Chlorothalonil	Likely ¹		X ¹⁵		X ¹⁵
Maneb	B2 ¹	X ¹⁵	X ²	X ²	X ²
PCNB	C ¹	X ¹⁵		X ¹⁵	
Sulfur					X ²
Triadimefon	C ¹	X ⁸	X ²	X ²	
Ziram	Likely ¹	X ²	X ¹⁵	X ¹⁵	X ²
	Cancer	Reproductive Effects	Neurotoxicity	Kidney / Liver Damage	Sensitizer / Irritant
Total	24	25	33	33	39

X = Adverse effects demonstrated.

B2 = U.S. EPA weight-of-evidence category, “probable human carcinogen, sufficient evidence in animals and inadequate or no evidence in humans.”

C = U.S. EPA weight-of-evidence category, “possible human carcinogen” rating.

D = U.S. EPA weight-of-evidence category, “not classifiable as to human carcinogenicity,” usually due to inadequate data.

2B = International Agency for Research on Cancer, World Health Organization (IARC) category, the agent (mixture) is possibly carcinogenic to humans.

Likely = U.S. EPA, “Likely to be carcinogenic to humans.”

Sources: This list is a compilation analysis by Beyond Pesticides with data collected through surveys on pesticide use and pest management practices from around the country. Surveys include:

Addiss, S., et al. 1999. *Pest Control Practices in CT Public Schools*. Environment and Human Health, Inc.

<http://www.ehhi.org/reports/pestschools/>

Agricultural Resources Center & Pesticide Education Project. 2003. *Clean Schools, Safe Kids*. www.PESTed.org

Alabama Cooperative Extension. 2000. *Alabama School Pest Management Survey*

Becker, B., et al. 1998. *Final Report on Pesticide Use in Wisconsin Schools*. Publication # AR-263. Wisconsin Department of Agriculture, Trade and Consumer Protection

Braband, et al. 2002. *Pest Management Practices: A survey of public school districts in New York State*. NYS Education Department, the NYS Department of Health, and the NYS Community IPM Program.

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Lilley, S., et al. 2002. *Pest Control Practices in North Carolina Public Schools*. <http://ipm.ncsu.edu/urban/cropsci/SchoolIPM/reports.html>

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Loudon, E. 1999. *Weed Wars: Pesticide Use in Washington Schools*. Washington Toxics Coalition. Seattle WA.

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Massachusetts Public Interest Research Group, 1996. *Primary Exposure: Pesticides in Massachusetts*

Schools. <http://www.pirg.org/masspirg/index.htm>

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http://www.vpirg.org/campaigns/environmentalHealth/pesticide_report.pdf

Minnesota Department of Agriculture. 2002. *Pest Management Survey of Day Cares, Head Starts, and Preschools*.

<http://www.mda.state.mn.us/ipm/ipmpubs.html>. Mitchell, K., ed. 1999. *Pesticide Report Card: Texas Schools Score from A to F in the Integrated Pest Management Program*. Texas Pesticide Information Network/Consumers Union.

<http://www.texascenter.org/txpin/right.htm>

Murray, K., 2000. *What's Bugging Our Schools?: Pest Concerns and Pesticide Use in Maine Public Schools*. Maine Department of Agriculture, Food and Rural Resources.

http://www.state.me.us/agriculture/pesticides/schoolipm/schoolipm_report.pdf

New York State Environmental Protection Bureau. 2000. *Pesticide Use at New York Schools: Reducing the Risk*. http://www.oag.state.ny.us/press/reports/pesticide_school/table_of_contents.html

Northwest Coalition for Alternatives to Pesticides and Oregon Center for Environmental Health. 1998. *Pesticide Use by the Portland School District*. <http://www.pesticide.org/PDXSchools.html>

Ohio State University. 2001. *Ohio Schools Pest Management Survey*. <http://ipm.osu.edu/school/survey.htm>

Olle, T. 2000. "P" is for Poison: Update on Pesticide Use in California Schools. CALPIRG Charitable Trust and Californians for Pesticide Reform. <http://www.pirg.org/calpirg/reports/healthyschools.pdf>

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⁶ Illinois EPA. 1997. Illinois EPA Endocrine Disruptors Strategy. Springfield, IL. www.nihs.go.jp/hse/envIRON/illiepatable.htm.

⁷ U.S. EPA. 2003. Handbook for Non-Cancer Health Effects Valuation, Appendix C: Case Studies, Economic Valuation of Endocrine Disruption: Introduction. Science Policy Council. www.epa.gov/osp/spc/Endoqs.htm.

⁸ California EPA. 2003. Chemicals Known to the State to Cause Cancer or Reproductive Toxicity. Office of Environmental Health Hazard Assessment. www.oehha.org/prop65/prop65/list/71103LSTA.html.

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¹⁰ World Health Organization. 1990. d-Phenothrin. Environmental Health Criteria. Geneva.

¹¹ Cox, C. 2002. "Piperonyl Butoxide." *Journal of Pesticide Reform* 22(2): 12-20. www.pesticide.org/PiperonylButoxide.pdf.

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¹⁵ Environmental Defense Fund, Scoreboard Database, www.scorecard.org/chemical-profiles/.

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SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Paul Towers	PAN	Support	No

Comments: Dear Chair Tokuda and Committee Members, On behalf of PAN North America and our members across Hawaii, I respectfully ask for your support of SB1037, a bill that would ensure greater transparency around pesticides used across the islands. For the past thirty years, PAN has worked on behalf of the most vulnerable members of Hawaii's food and farming system, from children and farmworkers, to small-scale farmers and those living at field's edge. And, on behalf of these constituencies, we urge you to pass a bill that would create greater greater transparency so that they can make informed decisions in their own lives and so the state can help create better public policy that protects residents from hazardous pesticide use. Sincerely, Paul Towers
Organizing & Media Director

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Planned Parenthood of Hawaii

To: Hawaii State Senate Committee on Ways and Means
Hearing Date/Time: Tuesday, March 2, 2015, 9:05 a.m.
Place: Hawaii State Capitol, Rm. 211
Re: Testimony of Planned Parenthood of Hawaii in support of S.B. 1037, SD1

Dear Chair Tokuda and members of the Committee on Ways and Means,

Planned Parenthood of Hawaii writes in support of S.B. 1037, SD1, which seeks to require the department of health to establish a mandatory disclosure program for pesticide use by all persons or entities under certain circumstances.

Planned Parenthood of Hawaii is dedicated to providing Hawaii's people with high quality, affordable and confidential sexual and reproductive health care, education, and advocacy. To that end, we support increased pesticide regulation because it will help to ensure that pesticides are used in a safe manner and at safe levels and help to mitigate the impact of pesticides on reproductive health.

As pesticide use is widespread across Hawaii, we must be vigilant in preventing harmful exposures before they occur. Please note that women of reproductive age and both male and female farmworkers and those who work with pesticides are particularly vulnerable to excessive exposure. According to a recent study from the University of California, San Francisco, pesticide exposure can harm the reproductive health and function of adult females during all developmental stages and has been associated with male sterility, spontaneous abortion, diminished fetal growth and survival and childhood and adult cancers.¹ Increasing pesticide regulation will serve to reduce the risks associated with pesticide exposure and promote the overall public health of our communities.

Thank you for this opportunity to testify in support.

Sincerely,

Laurie Field
Director of Public Affairs & Government Relations

¹ See, e.g., University of California, San Francisco Program on Reproductive Health and the Environment, *Pesticides Matter, A Primer for Reproductive Health Physicians* (Dec., 2011), available at http://prhe.ucsf.edu/prhe/pdfs/pesticidesmatter_whitepaper.pdf.

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SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Stuart Coleman	Surfrider Foundation	Support	No

Comments:

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Testimony from Jeff Case, Senior Director Government Affairs, CropLife America

In opposition to SB 1037

Tuesday, Mar. 3, Room 211 – Senate Committee on Ways and Means

Aloha Chair Tokuda, Vice Chair Kouchi and Committee Members:

CropLife America represents the manufactures and registrants of pesticide products that are used for agriculture production. We recognize the need for these valuable crop protection products to be used in a manner that is protective to schools, children and sensitive environmental areas. But we are opposed to SB 1037.

This bill will not provide any additional public or environmental safety than already exists in the use requirements, many precautions and setbacks identified on the product use labels which are enforceable by state and federal law. We dispute the idea that there are wide-spread problems with pesticide applications in the state, and the need for these extensive and unprecedented measures.

SB 1037 has been develop and promoted by national anti-pesticide /agriculture organizations like Center for Food Safety and EarthJustice. The goal of these national well- funded groups is to make growing genetically modified crops in Hawaii as difficult as possible and has less to do with concerns about pesticide use.

In fact, the State Department of Agriculture reported at a recent hearing in the House that of all the pesticide odor complaints and incidents logged, only one was attributed to a turf farmer. The rest were the result of homeowner misuse. No other issue has arisen over pesticide use or misuse by farmers – seed or otherwise. Therefore SB 1037 serves absolutely no purpose because it does nothing to address the necessary educational need of proper pesticide use by homeowners.

Instead, the legislature had the opportunity to hear SB 734 which would have given the Department of Agriculture the resources to properly regulate pesticide use amongst the majority of user outside of agriculture. If lawmakers are sincere about addressing public safety, support the pesticide branch of the Dept. of Ag. Please defer SB 1037.

Mahalo for your consideration.



Cindy Goldstein, Ph. D
Industry Relations Manager
DuPont Pioneer
Waialua Parent Seed, Kekaha Parent Seed
Kunia Research Center, Waimea Research
PO Box 520
Waialua, HI 96791

SB 1037 SD1 - Relating to Pesticides
Senate Committee on Ways and Means
Tuesday March 3, 2015
Room 211 at 9:05 a.m.

Position: Opposed

Chair Tokuda, Vice Chair Kouchi, and Members of the Committees,

DuPont Pioneer is a seed company with farming operations in four locations in Hawaii. DuPont Pioneer employs approximately 300 people in a wide range of types of jobs on Oahu and Kaua`i. Our farm management practices include the application of science and technology, and innovative farming techniques that include the responsible use of pesticides.

Farmers understand the importance of good stewardship practices, with judicious use of pesticides and management practices that reduce pests. We handle pesticides in a manner that is safe and consistent with state and federal requirements.

We are opposed to SB 1037 SD1, which impacts many of Hawaii's most productive farms. The larger agricultural users of pest control products are amongst the most highly trained and skilled users, following labels and regulations specific for each product.

While questions and concerns arise related to pesticide use, SB1037 SD1 only asks entities and individuals engaged with agricultural use of pesticides to report detailed accounting each time a pesticide is applied. A 2013-2014 Hawaii Dept of Health statewide pesticide sampling study of surface water found the highest number of different pesticides in urban streams on Oahu. This same DOH study detected an herbicide that is widely used for home, commercial, landscaping, roadside, and agricultural weed management. Yet this bill only calls for agricultural users to report, and picks an arbitrary number of acres as a standard for determining which farms and agricultural entities must comply.

Rather than supporting Hawaii agriculture and local food production, this bill will negatively impact farming operations across the State of Hawaii. While there are many users of pest control products, SB1037 SD1 narrowly targets a small group of pesticide

users, subjecting these farm operations to frequent and onerous reporting rules. This is bad policy and precedent.

DuPont Pioneer supports all types of agriculture and we encourage policies that enable farmers to thrive. The potential for extension of these policies to other farms and businesses over time would negatively affect other entities that use organic and conventional EPA registered products to control weeds, insects, and diseases.

Thank you for the opportunity to provide testimony in opposition to SB 1037 SD1.

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Alan Gottlieb	Hawaii Cattlemen's Council	Oppose	No

Comments: Aloha Chair Tokuda and Committee Members, My name is Alan Gottlieb, and I am a rancher and the Government Affairs Chair for the Hawaii Cattlemen's Council. The Hawaii Cattlemen's Council, Inc. (HCC) is the Statewide umbrella organization comprised of the five county level Cattlemen's Associations. Our 130+ member ranchers represent over 60,000 head of beef cows; more than 75% of all the beef cows in the State. Ranchers are the stewards of approximately 25% of the State's total land mass. The Hawaii Cattlemen's Council strongly opposes this bill. It Targets Farmers and agriculture ONLY.... It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii.... Demands Mandatory disclosure of all pesticides every month... The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation. Here are examples of persons who may be Required to make a monthly disclosure... Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle. Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members. Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County. Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time. Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis. Please Kill this Bill.... Mahalo

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Hawaii Crop Improvement Association

Growing the Future of Worldwide Agriculture in Hawaii

In Strong Opposition to SB 1037 Relating to Pesticide Disclosure

SENATE COMMITTEE ON WAYS AND MEANS
March 3, 2015, 9:05 a.m. at Conference room 211

HCIA 2014-2016 Board of Directors

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Immediate Past President
Mark Phillipson

Executive Director
Bennette Misalucha

Aloha Chair Tokuda, Vice Chair Kouchi and Members of the Committee,

My name is Bennette Misalucha, Executive Director of the Hawaii Crop Improvement Association. HCIA is a Hawaii-based non-profit organization that promotes ag bio tech to help farmers and communities succeed. Through education, collaboration and advocacy, we work to ensure a safe and sustainable food supply, support responsible farming practices and build a healthy state economy.

HCIA respectfully opposes SB 1037.

Pesticides are used throughout the world and in Hawaii to control pests and disease carriers, such as mosquitoes, ticks, and rodents. They are used in our drinking water to prevent disease and in our watersheds to control invasive species. Pesticides are also used in agriculture to control weeds, insect infestation, and diseases that can completely destroy a crop. Even organic agriculture uses pesticides.

Our member companies are very aware of their responsibility to use pesticides properly and they take this duty very seriously. They use trained employees who are experienced in pesticide application and apply them only when necessary. The safety of our employees and the community is of utmost importance to us and we follow the strict federal and State pesticide laws and regulations carefully. We are regularly inspected by the State Department of Agriculture Pesticide Branch whose duty is to enforce these laws.

We oppose SB 1037 because it indiscriminately targets agriculture despite the fact that agriculture only accounts for 25% of RUP use in Hawaii. It also seems to ignore recent studies conducted by the Department of Health and the Department of Agriculture which underscore that pesticide use in agriculture has not been linked to incidences related to school evacuations or surface water contaminations.

We believe that if passed, SB 1037 will harm all of agriculture, both organic and traditional farming, since it will impose additional burdens of record-keeping and ultimately will impact the efficiency of farming operations.

Rather than create new and arbitrary laws that will make it more difficult for farmers to stay in business in Hawaii, we support other pesticide-related bills introduced this session that would give the HDOA and the University of Hawaii increased funding and capacity to more effectively perform their roles, including educating growers and others to ensure proper pesticide use and assistance in implementation of pesticide drift reduction strategies.

We appreciate the opportunity to submit testimony.

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March 3, 2015

HEARING BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

Testimony on Senate Bill 1037 SD1
RELATING TO THE HEALTH IMPACTS OF PESTICIDES

Room 211
9:05 AM

Aloha Chair Tokuda, Vice Chair Kouchi, and Members of the Committee:

I am Christopher Manfredi, President of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,932 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

The Hawaii Farm Bureau strongly opposes Senate Bill 1037 SD1.

HFB holds the strong belief that health and safety must come first in every enterprise. Hawaii's farmers and ranchers are often protective parents with children and grandchildren of school age, and are proud and active members of the communities in which they farm. We are opposed to this bill because it unjustly targets certain farmers and will do nothing to increase public health and safety.

Overburdening recordkeeping and online publishing of pesticide use will not address health nor environmental concerns. Finite agency resources could be better applied toward education and enforcement of existing regulations. Funding would be better directed toward determining *if* there is a problem, and if one exists, to determine its cause and solution. Decision making based on fear and misinformation will lead to flawed policy.

As you already know, earning a living by farming is extremely difficult in Hawaii. The cost of land, water, labor, inputs, fuel, electricity, transportation, farm supplies and equipment are often many times greater than anywhere else. Added to this is the cost to protect crops from ever-increasing numbers and types of insects, weeds and disease. At a time when Hawaii is struggling to increase local food and energy production, no new law should be considered that will inhibit that goal unless it is both necessary and reasonable. This bill is neither.

We respectfully offer the following comments on this measure:

- Unjustified and unfair
Pesticides are commonly used by homeowners, businesses, and government, but this bill targets only farmers. It arbitrarily targets large farmers (those that cultivate crops on two hundred or more acres within a single county in any calendar year). To justify

passage, the previous committees' report claims that there have been at least six episodes of pesticide-induced illness at schools since 2006. Hawaii Department of Agriculture records show that over the last nine years, only one of the school-related pesticide incidents was in any way related to pesticide use by a farmer (a small grower of turf grass). Existing pesticide laws and enforcement addressed that violation. These statistics support our position that a problem must first be established prior to a determination of cause and solution to address the documented cause.

- Promotes flawed public perception that all pesticide use is harmful.

This perception completely overlooks the many beneficial *and necessary* uses of these products. It ignores the strict regulatory framework that governs their use. Used properly, pesticides do not pose a public health or safety risk. In fact, pesticides are used regularly in Hawaii not only to protect our farm crops from insect damage, harmful and deadly diseases (like rat-lungworm), and for weed control, but also to protect our drinking water from pathogens that cause disease. Pesticides protect our homes, schools, businesses and places of worship from destructive insects that carry diseases and attack structures, and they protect our environment and watersheds from noxious, invasive species like Little Fire Ant and Miconia.

Under this measure, no non-agricultural user would be subject to these burdensome and unnecessary requirements. It is unfair and unjustified that agriculturalists are sole target of this measure. In the event that modern and legal pesticide use is deemed a public health and safety hazard, then all pesticide use should be included. Among them are state and county roadside sprayers, the drinking water and wastewater treatment plants, the hotels and hospitals, golf courses, and homeowners and pest control industry.

- Wrong agency

The bill proposes to create an entirely new, costly and unnecessary program under the State Department of Health, despite the fact that the State Department of *Agriculture* already has the authority, staff, and experience to regulate pesticides.

- Right to know vs Right to harass and intimidate.

Under the guise of "right-to-know," this measure will make law-abiding farmers and ranchers a target for those with extreme viewpoints and agendas that are not necessarily aligned with the broader community. Pesticide use information posted on a public website can be abused to target, harass, and intimidate those who legally use products approved by EPA and HDOA. The information can be used unjustly to raise unfounded doubts about the safety of a crop by a competitor or anyone harboring a grudge against the user.

- The issue of pesticide use reporting was recently researched by the Legislative Reference Bureau (LRB) in response to section 3 of Act 105, Session Laws of Hawaii 2013. The LRB was directed to determine whether other states impose reporting requirements on pesticides. LRB reported that few states have pesticide use reporting requirements, fewer have implemented them, the effectiveness of the programs is unknown, and the costs are significant and in some instances prohibitive:

"After reviewing the laws and regulations of other states, it appears that the majority of states do not impose any reporting requirements on pesticides that do not fall within the definition of a restricted use pesticide. Among the seven states that address general use pesticides to any extent, there is some variation as to whether the reporting requirements imposed by a particular state apply to the sale, use, or both the sale and use of general use pesticides. Further, there appears to be a great deal of variation between the extent to which these reporting requirements are applied and enforced from one state to another. It

should be noted that, in addition to the fact that each of these states employs a different approach with regard to reporting requirements, the Bureau could not find any sort of comprehensive evaluation on the effectiveness of any of the various reporting programs. Therefore, it is difficult to determine whether and to what extent any of them have been successful in achieving the objectives for which each program was established. The Bureau was unable to secure detailed information regarding the costs incurred by these states in establishing and maintaining their various reporting programs. The Bureau offers no conclusions regarding the budgetary requirements of such programs, other than to note that, as discussed previously, both Oregon and New York appear to have encountered difficulties resulting from the cost of maintaining their reporting programs.”

We respectfully request that you allow Hawaii’s farmers the opportunity to continue farming without unwarranted and burdensome new requirements. If pesticide use is truly of concern, please consider the concepts included in an alternative measure introduced this session, SB 734, that would increase funding and expand the capacity of HDOA to better address pesticide issues and ensure public safety, while allowing agriculture to remain viable in Hawaii.

Thank you for the opportunity to testify *in opposition* to SB 1037 SB1.



Members of the Hawaii State Senate Ways and Means Committee

In regard to SB1037, a measure intended to mandate reporting of pesticide use to the DOH.

March 2, 2015

Greetings,

My name is David Schell and I manage the agricultural holdings of Island Princess in Kea'au on the Big Island. I am writing to encourage you to reject SB 1037 as unnecessary redundancy and unjustifiably burdensome to food producers in the state.

To begin with, the state Department of Agriculture already collects information from growers on their use of any materials that are considered by the EPA to present the possibility of compromising the health of the environment or individuals who have been inadvertently exposed. This information is a matter of public record and failure of growers to comply with the existing reporting requirements or with label instructions can lead to fines and sanctions. Since anyone who wishes to review this information can do so, it is pointless to require the Department of Health to conduct redundant reporting and is a waste of taxpayer's money and department resources.

This bill also unfairly targets larger agricultural concerns. Is there any documented proof businesses that operate holdings in excess of 200 acres are any more likely to abuse the use of pesticide materials than a grower who farms on one-half an acre? Why 200 acres? What is magical about this number? Besides, the use of pesticides is a targeted event. I might, for instance, make a pesticide application on a single block that could very well encompass a smaller area than a "small" farmer may make. Why would I be required to report while the other grower is not simply because I manage more property? This legislation is discriminatory and would not stand up to legal challenges.

How does this additional reporting in any way define or clarify the "health impacts" of pesticide use in Hawaii? The EPA conducts extensive reviews on any chemical that is proposed for use in agribusiness and those reviews include sound scientific measurements of the chemical's impact on the environment and people's health. Based on the information, clear rules are established for the proper use of each chemical, including spray concentrations, re-entry times and posting requirements, pre-harvest intervals and which crops may be treated. Can the state DOH do any

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better at this analysis? Will their monitoring of pesticide use here serve to improve the health of the people in this state? If so, how?

If we were actually faced with tangible evidence that farmers who farm more than 200 acres were creating an unsafe environment, I would be the first to call for further regulation and oversight. (I think people forget that we farmers are far more likely to be compromised by dangerous pesticide materials that are poorly managed than the average citizen.) I don't want my family and friends poisoned any more than any one else does. Is this so hard to understand?

I would greatly appreciate your "no" vote on this measure.

Thank you for your time.

David Schell
Island Princess
Kea'au Operations.

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**LARRY JEFTS FARMS, LLC
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SB 1073sd1, Relating to the Health Impact of Pesticides
Senate WAM

Testimony by: Larry Jefts
Position: Oppose

Chair Tokuda, and Members of the Senate WAM Committee:

I am Larry Jefts, owner and operator of Larry Jefts Farms, LLC, which is part of our family-run business of farms on Oahu and Molokai, under the administrative umbrella of Sugarland Growers, Inc. We have more than 35 years of Hawaii farm experience on Molokai and Oahu.

Opposition is expressed because the proposed bill appears to unfairly and arbitrarily target farms of 200 acres or more when most if not all farms use pesticides, as well as other Integrated Pest Management strategies to manage insect pests and plant disease.

It is not clear how it would be legal to target farms of certain acreage for rationale that is not science-based.

Responsible farmers, the community and policy makers are all concerned about the safety of workers and residents. A science-based discussion is suggested, much like Peter Adler's Kauai Joint Fact Finding Group's discussion which is anticipated to be completed by the end of 2015. "The overall goals of any JFF (Joint Fact Finding) are to illuminate the factual assumptions behind a controversy, map areas of factual agreement that all parties can respect, put those areas in a proper context, and help inform policy making," added Adler."
<http://hdoa.hawaii.gov/blog/main/kauaiproject/>

Thank you for the opportunity to submit testimony.

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Warren Watanabe	Maui County Farm Bureau	Oppose	No

Comments:

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SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Stephenson	Molokai Chamber of Commerce	Oppose	No

Comments: Aloha Chair Tokuda, Vice Chair Kouchi and Committee Members. The Molokai Chamber of Commerce, Which represents dozens of businesses that employ hundreds of our Molokai Friends, Neighbors and Family Members, stands in opposition to this measure and respectfully requests that you hold it in committee. This measure is an assault on farmers and belittles the rich history and heritage of our Hawaii Agriculture Community. If the proponents of this measure are truly concerned about the safety of our neighbors, friends and families, then a comprehensive look should be taken at all pesticide usage and meaningful policy crafted based on sound and widely accepted scientific data. If we are to grow our agricultural sector in Hawaii then placing these types of meaningless burdens and administrative hurdles in front of our farmers is sure to have the opposite effect. Thank you for your time and consideration. Mahalo, Rob Stephenson President Molokai Chamber of Commerce

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TESTIMONY SUBMITTED TO THE
SENATE COMMITTEE ON WAYS AND MEANS

MARCH 3, 2015

TESTIMONY ON SB 1037
RELATING TO THE HEALTH IMPACTS OF PESTICIDES

Chair Tokuda and committee members:

My name is Dr. John Purcell, Vice President, Business and Technology Lead Monsanto Hawaii. Thank you for allowing us to comment on SB1037.

Safety is Monsanto's number one priority - safety for our employees, safety for our communities and safety for the environment. Monsanto is also committed to being a responsible steward of the land. We utilize soil and water conservation practices in all of our farm operations. Many farmers, including Monsanto, use an integrated pest management program that takes advantage of all appropriate pest management options including the targeted use of pesticides that includes the right rate at the right time.

We know the public has questions regarding pesticide use, and we want to engage in a dialogue. However, good public policy must and should be based on facts. We encourage the committee to examine the basic facts on pesticide use in Hawaii to assess what risk these uses might present to the population and the environment. The fact that the Senate did not extend this proposed regulation beyond agricultural users to all users of pesticides makes it clear that the Senate recognizes that pesticides have value for society, are strictly regulated and can be applied safely from an applicator and public health perspective.

The Hawaii State Department of Agriculture has the data on purchases of Restricted Use Pesticides (RUPs). Consideration of legislation on reporting requirements could start with the actual facts and figures that define what sectors employ RUPs and how much they use. We recognize that this bill proposes reporting on all pesticides but the RUP data is already available and would allow the committee to examine data on purchases by sector.

We encourage you to keep the basic principles of risk assessment in mind as you consider legislation and to make facts the cornerstone of any such legislation. A thorough examination of the facts can provide an excellent opportunity to not only understand any actual risks posed by the use of pesticides, but to also educate the public on those risks and the value pesticides bring to our communities. The citizens of Hawaii deserve this.

We respectfully oppose this measure.

Thank you.

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
William Jacintho	The Maui Cattlemen's Association	Oppose	Yes

Comments: The Maui Cattlemen's Association Opposes this bill, as it puts ALL Ag Producers, not all users, in an unfair position, INCLUDING ORGANIC producers. Reporting does nothing to preventing a problem from happening. This requirement only adds more layers of work to producers. If there are problems, there should be other ways, other than this, of dealing with them. Thank you, William Jacintho, President.

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WPHA

Western Plant Health Association

March 3, 2015

TO: COMMITTEE ON WAYS AND MEANS
Senator Jill N. Tokuda, Chair
Senator Ronald D. Kouchi, Vice Chair

FR: Renee Pinel, President and CEO
Western Plant Health Association

RE: S.B. 1037 SD1 Relating to the Health Impact of Pesticides.
Position: Oppose

Dear Chair Jill N. Tokuda, Vice Chair Ronald D. Kouchi and members,

On behalf of the Western Plant Health Association (WPHA) I am writing to express our **opposition** to SB 1037 SD1 mandating disclosure of pesticide use by large-scale agricultural entities. WPHA represents the interests of fertilizer and pesticide manufacturers, agricultural biotechnology providers, and agricultural retailers in Hawaii, California and Arizona.

The purported goal of this bill is to provide information to the public on pesticide use. However, as written, the bill fails to establish uniform reporting of restricted use pesticides. The bill is written to apply only to agricultural commodities that are planted, raised and harvested within a single year and only to large-scale agricultural entities. The entities that would be subject to the reporting requirements of this law would then be burdened by having to report all pesticide use. This includes reporting of general use pesticides, available to the public. The result is inequitable treatment of pesticide users.

WPHA opposes reporting of pesticide use to the department of health. The Hawaii Department of Agriculture is responsible for the regulation and oversight of pesticide products and their use. The department of agriculture staff already provides expert analysis of pesticide products and should continue to maintain authority in all areas of pesticide use.

WPHA is also concerned with the bill's requirement to disclose confidential business information to the public. The requirement to provide specificity as to the location of use, the amount of pesticides used, and inert ingredients used would reveal trade secrets. This could also put crops at risk.

We appreciate the opportunity to share our concerns.

Sincerely,

Renee Pinel
President/CEO

**SB 1037 SD1
RELATING TO THE HEALTH IMPACT OF PESTICIDES**

**PAUL T. OSHIRO
MANAGER – GOVERNMENT RELATIONS
ALEXANDER & BALDWIN, INC.**

MARCH 3, 2015

Chair Tokuda and Members of the Senate Committee on Ways & Means:

I am Paul Oshiro, testifying on behalf of Alexander & Baldwin, Inc. (A&B) and its agricultural company Hawaiian Commercial & Sugar Company on SB 1037 SD1, A BILL FOR AN ACT RELATING TO THE HEALTH IMPACT OF PESTICIDES.

Pesticide use in Hawaii is extensively regulated by both the Federal Environmental Protection Agency and the State Department of Agriculture under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Hawaii Pesticide Law (Chapter 149A, HRS). Depending upon the pesticide and its intended use, the EPA and the State impose mandatory conditions and requirements that are science based and designed to protect the pesticide applicator, the general public, and the environment. These requirements may include, but are not limited to, maximum application rates, using only specified application methods and equipment, application only under specified weather conditions, prohibition of any pesticide drift to neighboring properties that causes health or environmental harm, and, in the case of restricted use pesticides, allowing use only by or under the direct supervision of certified pesticide applicators.

Pesticide labels contain specific instructions such as what the pesticide may be used on, how much of the pesticide may be used, how often the pesticide can be used, and worker protection requirements. Federal Law states that the pesticide label is the law, and that use of the pesticide that is not in conformance with the label is a violation of Federal Law and may result in fines and/or imprisonment.

This bill includes provisions to impose new regulations on the use of all pesticides by any entity or person that cultivates crops on 200 or more acres within a single County. Mandatory disclosure of pesticide use is required for all pesticides used by these entities and persons.

We believe that the mandatory pesticide disclosure requirements imposed by this bill may create unintended negative consequences. By imposing these mandatory pesticide disclosure requirements without accompanying public education on Federal and State pesticide oversight and regulation, this may result in an increase in the number of inquiries, complaints, and non-science based comments and concerns. In addition, while this bill identifies the State Department of Health as the entity responsible to implement this mandatory disclosure of pesticide use, we understand that the State Department of Agriculture is statutorily authorized to regulate the distribution, sale, and use of pesticides in the State of Hawaii.

Thank you for the opportunity to testify.

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: suz505@aol.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Friday, February 27, 2015 5:09:48 PM

SB1037

Submitted on: 2/27/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Susan Frey	Individual	Support	No

Comments: Please pass this bill for our keiki.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: klayton1kubo@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Friday, February 27, 2015 6:07:36 PM

SB1037

Submitted on: 2/27/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Klayton Kubo	Individual	Support	Yes

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: likowallace@ymail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Friday, February 27, 2015 9:39:32 PM

SB1037

Submitted on: 2/27/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Faye L Wallace	Individual	Support	No

Comments: I urge you to require the department of health to establish a mandatory disclosure program for pesticide use by all persons or entities under certain circumstances.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: faypacheco@yahoo.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Friday, February 27, 2015 9:40:55 PM

SB1037

Submitted on: 2/27/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Fay I Pacheco	Individual	Support	No

Comments: Please pass this crucial bill that requires the department of health to establish a mandatory disclosure program for pesticide use by all persons or entities under certain circumstances.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: foodsovereigntynow@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Friday, February 27, 2015 10:04:17 PM

SB1037

Submitted on: 2/27/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Mitsuko Hayakawa	Individual	Support	No

Comments: I am in strong support of SB1037 which requires the department of health to establish a mandatory disclosure program for pesticide use. This is an opportunity for the state to study the impacts of specific pesticides in our communities. Full disclosure would also allow the public and health practitioners to make links and provide appropriate healthcare should they suspect exposure. The state lacks adequate regulation on all pesticides and this bill which addresses the most toxic pesticides would be a good place to start.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: dubielsdesign@hotmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Friday, February 27, 2015 11:03:31 PM

SB1037

Submitted on: 2/27/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Rexann Dubiel	Individual	Support	No

Comments: Please....support SB1037. We need to be protected on the North Shore. Pesticide drift is poison. UC Davis just published a study showing pregnant Moms exposed th farming pollution drift increases Autism and Birth Defects by 50%. Do the research, please. We are in a toxic situation. As a third grade teacher at Sunset Beach Elem. for 26 years, I have a vested interest in the welfare of children and so do you. Please support SB1037, protect our greatest resource for the future...Hawaii's keiki. Thank you.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: cjmellor626@yahoo.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Friday, February 27, 2015 11:17:27 PM

SB1037

Submitted on: 2/27/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
c mellor	Individual	Support	No

Comments: Passing this bill is essential for the health and wellness of everybody but especially those who are already ill or more sensitive to pesticides. Please protect our health and pass this bill. Mahalo

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mblazak@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Saturday, February 28, 2015 9:08:01 AM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Megan Blazak	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: svickery@hawaii.rr.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Saturday, February 28, 2015 9:41:58 AM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Susan Vickery	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: alanc@maui.net
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 9:44:40 AM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Alan Crammatte	Individual	Support	No

Comments: How are we to know if there is a problem with pesticide exposure if we don't know what is being sprayed? Disclosure is very sensible, why would anyone be against disclosing what pesticides are being used unless they are trying to hide something?

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From: MCKJSapp@aol.com
To: [WAM Testimony](#)
Subject: In support SB 1037; Hearing Date 3/3/15 at 9:05 AM
Date: Saturday, February 28, 2015 10:01:56 AM

My name is Carol Sappington and I live in Kapolei. I am writing in support of SB 1037. Hawai'i's children deserve greater protections from pesticide use and the public deserves to know what pesticides are being sprayed near our schools. Public notification of spraying will protect communities potentially impacted by pesticide drift, and pesticide disclosure will empower medical professionals with essential information so they can effectively treat patients with symptoms of pesticide exposure. Please pass SB 1037 to preserve the long-term health and well-being of our children and future generations. Mahalo for your attention.

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: jgelert@yahoo.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 11:15:10 AM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
John Gelert	Individual	Support	No

Comments: We need to know what they are spraying so we can know how they are harming us.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: harvest@kauai-vacations-realty.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 11:31:07 AM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Harvest Edmonds	Individual	Support	No

Comments: So important that pesticides are disclosed for many reasons - Nurses & Doctors must know what is being sprayed for diagnoses to be accurate. Buffers zones are of utmost importance also.

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From: [Trinidad Williams](#)
To: [WAM Testimony](#)
Subject: In support SB 1037; Hearing Date 3/3/15 at 9:05 AM
Date: Saturday, February 28, 2015 12:39:43 PM

Testimony in support of SB 1037 (pesticide disclosure bill) Monday deadline at 9:05 AM.

Dear Chair Tokuda, Vice Chair Kouchi and Members of the Committee,

My name is Trinidad A. Williams, and I live in Kihei, Maui. I am writing in support of SB 1037. Hawai'i's children deserve greater protections from pesticide use and the public deserves to know what pesticides are being sprayed near our schools. Public notification of spraying will protect communities potentially impacted by pesticide drift, and pesticide disclosure will empower medical professionals with essential information so they can effectively treat patients with symptoms of pesticide exposure. Please pass SB 1037 to preserve the long-term health and well-being of our children and future generations Mahalo for your attention.

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: shantison@hotmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 12:46:41 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
son geiger	Individual	Comments Only	No

Comments: I am an organic farmer from Kauai. We need to stop using Pesticides, it destroys our soils. We need to know what the big companies use and when they spray. Please help Hawaii to become a more healthy enviroment and therefore we need to know what is being used. Please pass Bill SB1037.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: drmlyukyo@yahoo.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 12:49:45 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
dr melissa yee	Individual	Support	No

Comments: I strongly support the passage of this bill to protect the people of Hawaii from pesticide spraying. Ideally we should ban the use of these chemicals but as a first step we need to give people notice that chemicals are being used so that they may take the measures to protect themselves and their children and pets from the drift and after effects. We are seeing the effects of three and four generations of chemical usage for monoculture crops, and the health conditions and environmental pollution indicate severe irreparable long term consequences. Chemicals can never be diluted or burned out of existence, and this bill may start the process to reduce their use in the future as more research shows how harmful the buildup is to humans, living creature, and the environment. Please pass this bill. Aloha, Dr. Melissa Yee
Seeds of Truth

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mark@marksheehan.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 1:22:31 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Sheehan	Individual	Support	No

Comments: Dear Chair Tokuda and committee members: I have been studying pesticide use on Maui and in Hawaii for years. It is essential that the public become aware of the widespread use of the highly toxic chemicals being used close to residential areas, schools, parks and hospitals. For years I have studied the health impact of these toxins. It is terrifying to think that we allow such massive use of these herbicides and pesticides when we know what effect they have. And please, take time to investigate for yourselves, these 'cides' kill more than insects. In fact, less than .001% of insecticides used actually kill insects, the rest wind up in the soil, air, surface and ground water, sea water and, yes, you, me and our children. May I suggest you read "Poison Spring" by E. G. Vallianotos? It will shock you how little oversight there has been by the EPA, how that agency has been dominated by chemical companies. Please take this first step protect our keiki and our precious environment. Mahalo, Mark Sheehan, Ph.D.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: sungods79@yahoo.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 2:32:19 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Sol Kahn	Individual	Support	No

Comments: The safety of our families should be first and foremost. Finding out that these were as bad as we thought too late is completely not acceptable. We need buffer zones. This shouldn't even be a question.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: sungods79@yahoo.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 2:32:24 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Sol Kahn	Individual	Support	No

Comments: The safety of our families should be first and foremost. Finding out that these were as bad as we thought too late is completely not acceptable. We need buffer zones. This shouldn't even be a question.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mmcardle19@aol.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 3:05:01 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Peggy McArdle	Individual	Support	No

Comments: Aloha. I strongly SUPPORT SB1037. Hawaii's children deserve greater protections from pesticide use and the public deserves to know what pesticides are being sprayed near our schools. Public notification of spraying will protect communities potentially impacted by pesticide drift. Also, pesticide disclosure will empower medical professionals with essential information so they can effectively treat patients with symptoms of pesticide exposure. Please protect Hawaii's Keiki and PASS SB1037. Mahalo.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: tulsi@mauiishome.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 3:34:08 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Tulsi	Individual	Support	No

Comments: please support this bill. We deserve to be protected from dangerous pesticides. I am a registered voter and strongly support this bill.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: tulsi@mauiishome.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 3:34:11 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Tulsi	Individual	Support	No

Comments: please support this bill. We deserve to be protected from dangerous pesticides. I am a registered voter and strongly support this bill.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: aileensma@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Saturday, February 28, 2015 6:38:20 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Aileen Ma	Individual	Support	No

Comments:

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From: [Jennifer Milholen](#)
To: [WAM Testimony](#)
Subject: In support SB 1037; Hearing Date 3/3/15 at 9:05 AM
Date: Saturday, February 28, 2015 6:53:02 PM

Dear Chair Tokuda, Vice Chair Kouchi and Members of the Committee,

My name is Jennifer Milholen, and I live in Diamond head. I am writing in support of SB 1037. Hawai'i's children deserve greater protections from pesticide use and the public deserves to know what pesticides are being sprayed near our schools. Public notification of spraying will protect communities potentially impacted by pesticide drift, and pesticide disclosure will empower medical professionals with essential information so they can effectively treat patients with symptoms of pesticide exposure. Please pass SB 1037 to preserve the long-term health and well-being of our children and future generations. Mahalo for your attention.

Jennifer Milholen

From: [Melissa Roderick-Cook](#)
To: [WAM Testimony](#)
Subject: In support SB 1037; Hearing Date 3/3/15 at 9:05 AM
Date: Saturday, February 28, 2015 7:15:43 PM

Dear Chair Tokuda, Vice Chair Kouchi and Members of the Committee,

My name is Melissa Roderick and I live in Makawao. I am writing in support of SB 1037. Children are among the most vulnerable to the negative health effects of pesticides. Schools need to be safe environments, not ones in which students, teachers and staff are exposed to unnecessary risk to their health and well being. We as a community deserve greater transparency in industry and government; disclosure of the harmful and potentially harmful pesticides that we are unwittingly being exposed to is a step in the right direction. Please pass SB 1037.

Mahalo for your time

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: anthuriumz@hotmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 8:46:38 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
wynnie hee	Individual	Support	No

Comments: YES,please,DISCLOSE pesticide/poisons use near schools and homes. This is NOT saying to STOP SPRAYING... just TELL THE PEOPLE WHAT they're spraying. That's all. Please pass this bill.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: rts5371@yahoo.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Saturday, February 28, 2015 10:05:31 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Roy Shitanaka	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: lauryn_rego@hotmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 11:45:53 PM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
lauryn rego	Individual	Support	No

Comments: Letting us know what is being sprayed is a great way to face this problem head on. It will provide a chance to move forward on this issue in a way that will benefit both sides. That is if you believe what the seed industry says to be truth. If so, then this information should support their claims that there is nothing to be concerned about. Even if that turns out to be the case, people deserve the right to know what they are being exposed to; Drs. need this information to be able to treat patients efficiently. Please pass this important bill. Mahalo

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: Marsha.Lowery@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 8:05:39 AM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Marsha Lowery ND	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: hbpalmer@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 8:48:34 AM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Hillary Palmer	Individual	Support	No

Comments: Please pass this bill. We, the People, have a right to know! Also please pass buffer zone bills as well. We need and are entitled to open and honest disclosure by these companies making billions of dollars. We need accountability!

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: sdd8978@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 8:53:01 AM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
sarah freistat pajimola	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: Janine@blackdogkauai.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 9:57:01 AM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Janine Lynne	Individual	Support	No

Comments: I am in strong support of this bill. If it is up to the state to monitor pesticides, the state needs to monitor pesticides.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: crisnpat@earthlink.net
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 10:10:25 AM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Cristine Sommer Simmons	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: aeryn.ralha@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 11:07:01 AM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Aeryn Ralha	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: phredwise@hotmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 2:11:01 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Freddy Von Essen	Individual	Support	No

Comments: Please do what is right for the people you represent and help to restore faith in our government. Thank you.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mendezj@hawaii.edu
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 2:33:18 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: debbie.hollomon@live.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 3:51:30 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
debbie	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: dubielsdesign@hotmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 4:09:24 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Rexann Dubiel	Individual	Support	No

Comments: Please, support SB1037. Protest the children and pregnant mothers. Protest us, it's your duty to look out for the welfare of Hawaii's residents and guests! The research is in...UCDavis study, May 2014 directly links pesticide drift to high incidences of autism and birth defects. Rexann Dubiel Veteran Teacher 26 years, Grade 3 Sunset Beach Elem.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: aliyahz@hawaii.edu
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 4:36:22 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Aliyah	Individual	Support	No

Comments: Please pass the bill. We want safe and healthy children and hope to see and understand that you care as well. Mahalo!

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: pravdina@hawaii.edu
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 7:02:26 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Anna	UH Manoa	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: derekbyou@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 7:30:51 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Derek You	Individual	Support	No

Comments:

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From: [Stathie John Prattas](#)
To: [WAM Testimony](#)
Subject: *****SPAM***** Please hear SB 1037
Date: Sunday, March 01, 2015 8:00:18 PM

Aloha Sen. Tokuda,

I urge your committee to pass SB 1037, though it is a far less effective bill than SB793--- which I favor.

Alternatively, I understand you have SB801, which would be preferable.

Aloha,

Stathie

Stathie J. Prattas (R) PB, **GREEN**, RSPS, ZPro
Hawaii Brokers Lic #RB 14592

Owner/President

Coast Properties Ltd

Bus: 808.329.4000

Cell: 808.895.4187

Web: www.CoastPropertiesHawaii.com

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: brimohi@msn.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 8:55:52 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Brian Emmons	Individual	Support	No

Comments:

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From: [r.wolf](#)
To: [WAM Testimony](#)
Subject: Chair Tokuda - please schedule SB1037 for a hearing
Date: Sunday, March 01, 2015 9:22:24 PM

----- Forwarded message -----

From: r wolf <indacauses@gmail.com>
Date: Sun, Mar 1, 2015 at 9:17 PM
Subject: Aloha Rosalyn - please schedule SB793 for a hearing
To: senbaker@capitol.hawaii.gov

My family lives in Kekaha. Our house is w/in a 1/4 mile of the fields that get sprayed with unknown chemicals in unknown doses in unknown combinations at unknown times. Trade winds be damned.

Our keiki attend schools that get doused with the same, as do our hospitals and playgrounds / parks.

The chemical companies use 4 TIMES more dosing of RUPs here on Kauai that any other place in the US.

We have ONE STATE INSPECTOR responsible for monitoring several thousand RUP chemical releases every year. An impossible job for 10 inspectors.

These types of practices are illegal in almost every other state.
The need to illegal in Hawaii as well.

Do the right thing.
Schedule SB793 / SB1037 for a hearing.
[Its just a hearing!!](#) Let the arguments and debate take place.

- Randy Wolfshagen
Kekaha, HI
[808.651.8656](tel:808.651.8656)

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: evernw@aol.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Sunday, March 01, 2015 9:59:14 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Evern Williams	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mdavid3@my.hpu.edu
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 10:33:05 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Michele David	Individual	Support	No

Comments: As a graduate student at Hawaii Pacific University studying Sustainable Development, I fully support this bill to establish notification and disclosure requirements for entities using large amounts of restricted use pesticides. We deserve to know what they are, and how much is being used. Please allow us to know what is being sprayed so that we can take precautions to protect the environment, animals, and humans (especially children) from the imperfect science that created these chemical compounds.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: legechair@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 11:45:53 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Simon Russell	Individual	Support	No

Comments: Aloha Kakou, Last year one of my workers was exposed to a cloud of pesticide drift, vomited and went unconscious. We were not notified by the farm next door. My farm is organic certified, and this is a direct threat to my organic certifiability, which gives me a higher market value for my products. Buffer zones and disclosure of pesticide use and in particular restricted use pesticides are completely necessary. Mahalo to those who vote in favor of this important measure. Simon Russell Farmer Haiku, Maui

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: hokuokekai50@msn.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 11:53:41 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Mary Lacques	Individual	Support	No

Comments: Thank you for hearing SB1037 SD1. Testimony in strong support to protect the most vulnerable in our society-our keiki and kupuna. Please watch Senator Green's Informational Briefing: Health Risks of Pesticide Exposure to Children to learn more about the effects of pesticides on developing bodies and brains: <http://new.livestream.com/accounts/311605/events/3743644>

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: harlom@hawaii.rr.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 12:10:48 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Diane Anderson	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: bradedward@aol.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 7:00:57 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Brad D Edwards	Individual	Support	No

Comments: Please support this bill and give every resident the right to be informed about the pesticides and herbicides that are being sprayed in our communities.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: chermcmaui@aol.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 8:14:35 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
cheryl hendrickson	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: kkburdt@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 8:36:58 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Kristen Koba-Burdtd	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: terez.amato@yahoo.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 9:04:42 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Terez Amato Lindsey	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: joeritter3@yahoo.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 9:05:47 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Joe Ritter	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: wkenkoike@hotmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 9:11:28 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
W. Ken Koike	Individual	Support	No

Comments: I am in STRONG SUPPORT of SB1037! As a small organic farmer in Wai'anae, I am asking you for protection from the assault against our health, our soil, our water and the cross-contamination to my crops by the overspray of poisonous chemicals and cross-pollination. Please stop this irresponsible behavior of those profiteering from the use of destructive practices. We live on an island that what goes around, comes around very quickly! The requirement for disclosure of ANY & ALL substances that could and will eventually end up in our water supply affects us all!. The state department of health and county boards of water supply should both test and check their respective aquifers to check and balance the results of all the pesticides being used on our islands. The costs of these tests should be charged as a user fee in proportion to everyone requesting to use these dangerous toxic and known poisons that threaten the health and safety of our communities. required Unlike the marketing hype of many pesticide and biotech companies, artificial chemical pesticides are NOT required or necessary to produce sufficient yield of food in today's society. Cuba is an excellent living example of this. After the fall of the Eastern Bloc countries, and the economic collapse of the USSR, Cuba was cut off from its trading partners and petrochemical supply making it impossible to continue its American style of agricultural dependance on heavy equipment, chemical fertilizers, chemical pesticides, and mono-crop/mono-culture production of sugar, coffee and tobacco. So without their big combines, harvesters, tractors, semi-trailers, or chemicals of modern agriculture. they were able to survive a "special period" where they made the transition to become the most sustainable, self-sufficient ORGANIC nation on earth producing over 80% of what they consume. And due to the US embargo, have done so all without the assistance of biotechnology! Because the large machines and factories could not be used, the need for people to be retrained and employed to provide food production actually had a total net reduction of unemployment in Cuba and a shift in focus to quality of production rather than just sheer quantity. Removing the advantage large conglomerates once had over individuals due to industrialization. As more and more producers entered the marketplace, pride of ownership and competition increased both the quality and quantity of food produced. Cuba's population is healthier now with lower rates of all major diseases than before the oil/economic shock happened in the 90's. Please AT LEAST require full disclosure of what type and how much known toxic/poisonous

chemical pesticides are being used so we can test for the impact they are having in our environment! Personally, I would prefer an outright BAN of ALL the TOXIC CHEMICALS and strengthen our tort reform in the court system that could hold the corporations using them accountable for the cleanup and healing of the people hurt by their actions!

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From: [Sunny Massad](#)
To: [WAM Testimony](#)
Subject: SB1037 - Testimony FOR Buffer Zones and Pesticide Disclosure
Date: Monday, March 02, 2015 9:46:44 AM

Senator Tokuda

My health has been adversely affected by the toxic agricultural practices on Oahu. I urge you to protect the health and wellbeing of all living things in our isolated environment. Pesticide disclosure and buffer zones would at least allow the public to have a choice about their exposure to chemicals.

Thank you for your consideration,
Sunny Massad, Ph.D.

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: davidsher@juno.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 10:48:10 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments: I strongly support SB1037. Disclosure requirements and buffer zones are reasonable measures to protect the health and well-being of vulnerable populations such as pregnant women and children. It is acutely disappointing to read opposition-testimony from entities that complain that this bill is burdensome and not needed. Protecting vulnerable populations should have priority over 'burden'. Full disclosure is needed for regulating Restricted Use Pesticides, as without full disclosure the public is not able to avoid the areas being treated and they do not know when to shut their windows. When they seek medical attention for exposure to pesticide drift, the attending physician has no idea as to the impacts of the exposure as they do not know what chemicals were applied or when. One of the most important roles of government is to protect the people. Please pass this bill. Respectfully, Sherry Pollack Ahuimanu

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: angelavideotron@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 11:01:46 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Angela Breene	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: hoonanea@aol.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 11:15:20 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Regina Gregory	EcoTipping Points	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mollymamaril@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 11:33:44 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Molly Mamaril	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: tulsi@mauiishome.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 11:35:26 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Tulsi	Individual	Support	No

Comments: Please support this bill. Our children deserve to be protected. I strongly support this bill.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mauisean08@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 11:58:41 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
John J. Grant	Individual	Support	No

Comments: I am a retired scientist . I am past president of California Association of Professional Scientists, an organization that represents all scientists in California government agencies. I worked extensively in pesticide investigations for the state government. I am writing to implore you to vote for SB1037SD1. The past history of most pesticides argues strongly that extreme caution is necessary to protect our environment and human health. I am sure you do not need to be reminded of the tragic impacts of DDT which we were guaranteed by the same manufacturer to be safe. Sadly, that pesticide is now banned world wide. Similar impacts have been recorded for numerous other chemicals. Please protect our health.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mauisean08@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 11:58:44 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
John J. Grant	Individual	Support	No

Comments: I am a retired scientist . I am past president of California Association of Professional Scientists, an organization that represents all scientists in California government agencies. I worked extensively in pesticide investigations for the state government. I am writing to implore you to vote for SB1037SD1. The past history of most pesticides argues strongly that extreme caution is necessary to protect our environment and human health. I am sure you do not need to be reminded of the tragic impacts of DDT which we were guaranteed by the same manufacturer to be safe. Sadly, that pesticide is now banned world wide. Similar impacts have been recorded for numerous other chemicals. Please protect our health.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: PelesGrrl@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 12:07:10 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Trinette Furtado	Individual	Support	No

Comments:

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From: k678@me.com
To: [WAM Testimony](#)
Subject: Support SB1037 for Pesticide Disclosure
Date: Monday, March 02, 2015 1:22:26 PM

My name is Andrew Rice, and I live in Kula. I am writing in support of SB1037. Hawai'i's children deserve greater protections from pesticide use and the public deserves to know what pesticides are being sprayed near our schools. Public notification of spraying will protect communities potentially impacted by pesticide drift, and pesticide disclosure will empower medical professionals with essential information so they can effectively treat patients with symptoms of pesticide exposure. Please pass SB 1037 to preserve the long-term health and well-being of our children and future generations. Mahalo for your attention.

Aloha,
Andrew Rice

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: miasarsfield@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 1:27:27 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Mia Sarsfield	Individual	Support	No

Comments: -establish no spray buffer zones around sensitive areas, including schools and hospitals, as well as disclosure and notification of spraying!

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: marcyfrommaui@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 1:32:51 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Marcy Koltun-Crilley	Individual	Support	No

Comments: Thank you for hearing this bill. I am an RN living in Kihei on Maui and I strongly support this bill. That being said it does not go far enough and is only a step needed to protect the people of Hawaii! There needs to be early notifications as well as large buffer zones to offer some type of help for pesticide drift. Kihei is bombarded with this drift and everyone living here knows it. The American Medical Association and other health organizations are telling you are keiki NEED these protections at the very LEAST! I am asking and fully expect the people that have been trusted to serve the people (not corporations) of Hawaii will do so and not ignore the advice of health professionals and organizations. Our keiki's lives depend on you doing the right thing! Mahalo Marcy Koltun-Crilley RN Kihei, Hi

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: tabraham08@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 3:02:28 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Troy Abraham	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: jpowermaui@yahoo.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 4:07:27 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Jami Power	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: ealoi@hawaii.edu
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 4:17:33 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Edward Aloii	Individual	Support	No

Comments:

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Review

Non-Hodgkin Lymphoma and Occupational Exposure to Agricultural Pesticide Chemical Groups and Active Ingredients: A Systematic Review and Meta-Analysis

Leah Schinasi * and Maria E. Leon

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Received: 12 February 2014; in revised form: 31 March 2014 / Accepted: 1 April 2014 /

Published: 23 April 2014

Abstract: This paper describes results from a systematic review and a series of meta-analyses of nearly three decades worth of epidemiologic research on the relationship between non-Hodgkin lymphoma (NHL) and occupational exposure to agricultural pesticide active ingredients and chemical groups. Estimates of associations of NHL with 21 pesticide chemical groups and 80 active ingredients were extracted from 44 papers, all of which reported results from analyses of studies conducted in high-income countries. Random effects meta-analyses showed that phenoxy herbicides, carbamate insecticides, organophosphorus insecticides and the active ingredient lindane, an organochlorine insecticide, were positively associated with NHL. In a handful of papers, associations between pesticides and NHL subtypes were reported; B cell lymphoma was positively associated with phenoxy herbicides and the organophosphorus herbicide glyphosate. Diffuse large B-cell lymphoma was positively associated with phenoxy herbicide exposure. Despite compelling evidence that NHL is associated with certain chemicals, this review indicates the need for investigations of a larger variety of pesticides in more geographic areas, especially in low- and middle-income countries, which, despite producing a large portion of the world's agriculture, were missing in the literature that were reviewed.

Keywords: pesticides; insecticides; herbicides; fungicides; lymphoma; non-Hodgkin; occupational; agricultural

1. Introduction

Striking increases in the incidence of non-Hodgkin lymphoma (NHL) cancer have occurred in the last 30 years [1,2], and interest in identifying environmental and occupational exposures associated with this cancer has accompanied this trend. Several environmental exposures have been proposed and investigated as potentially important—pesticides, dioxins, solvents, oils, and viruses, among others [3,4]. Farmers experience low overall mortality but high rates of some cancers; this suggests that some or several agricultural exposures may be key determinants [5,6]. Indeed, positive associations between NHL and farm related exposures, including pesticides, fertilizers, chemicals, animals, viruses, and endotoxin, have been observed previously [3,5,7]. However, the wide variety of chemical and microbial exposures that occur simultaneously in agricultural production makes disentangling the effects of these factors challenging. Of the many exposures experienced in farm settings, pesticides have drawn particular attention, especially since the increased incidence of NHL in the mid- to late-1900s followed widespread use of synthetic organic pesticides [4]. Also, several epidemiologic studies have reported positive associations between NHL and pesticide exposure in occupational manufacturing settings [8,9].

The United States Environmental Protection Agency defines pesticides as substances intended to prevent, destroy, repel, or mitigate a pest [10]. Within this broad category, pesticides are often grouped according to the type of pests that they control; for example, fungicides are used to kill fungi, insecticides to kill insects, and herbicides to kill weeds and plants. In addition to function, pesticides vary in terms of structure, and they are sometimes grouped according to chemical relationships. Furthermore, applicators often use a variety of pesticides simultaneously. These characteristics make designing and conducting epidemiologic studies of their health effects both challenging and expensive.

Because pesticides are thought to have different toxicologic and immunologic effects, identifying the chemicals and chemical groups that are most dangerous to humans and non-target living organisms is important [11]. From a research perspective, the decision about what chemicals to investigate has implications for disease prevention, and it impacts the information that is available to policy makers and the public.

These challenges and needs motivated us to systematically review the published epidemiologic literature of relationships of NHL with occupational exposures to agricultural pesticide chemical groups and active ingredients. The primary objectives of this paper were to investigate the depth of the literature on the relationship between specific pesticide chemicals and NHL, to identify gaps in this area of research, and to elucidate pesticide chemical groups and active ingredients that have shown particularly strong relationships with NHL. To help us to achieve these objectives, we conducted a series of meta-analyses of associations of individual pesticide chemicals with NHL.

2. Methods

2.1. Article Identification

We performed a search of literature on associations between occupational pesticide exposure and NHL. We restricted our search to articles published since 1980. This time period is consistent with that used in previous meta-analyses of farming exposures [5], and it captured the epidemiologic literature

that has not been reviewed by early IARC monograph evaluations of pesticides [12]. The search used combinations of the following words: occupational exposure, pesticides, insecticides, herbicides, fungicides, neoplasms, cancer, lymphomas, non-Hodgkin lymphoma, cancer mortality, agricultural workers' diseases/chemically induced, and humans. We entered combinations of these terms into PubMed and Web of Science. Details of the search are given in Supplementary file S1.

2.2. Article Selection

To identify eligible studies, we reviewed the titles and abstracts of papers. When it was unclear from the abstract and title whether the paper fit these criteria, the full text of the paper was reviewed. We included estimates from papers with the following characteristics:

- (1) Written and published in English;
- (2) Reported results of analyses of case control or cohort epidemiology studies;
- (3) Reported results of studies that used interviews, questionnaires, and/or exposure matrices to assess exposure;
- (4) Reported associations of NHL with occupational, agricultural pesticide exposures;
- (5) Reported quantitative associations of NHL overall and/or NHL subtypes with specific individual active ingredients or chemical groups.

We excluded papers with the following characteristics:

- (1) Written in a language other than English;
- (2) Did not report on associations with NHL;
- (3) Were a commentary, letter to the editor, or monograph;
- (4) Did not report associations with individual pesticide active ingredients or chemical groups; we excluded papers that reported associations with only the broadly defined categories of pesticide, insecticide, herbicide, or fungicide;
- (5) Reported results of analyses of ecologic studies;
- (6) Reported results of analyses of data from studies that were not case control or cohort in design;
- (7) The exposure definition/classification was ambiguous;
- (8) The exposure route was not occupational;
- (9) The exposure route was not agricultural;
- (10) Reported only associations within unique subpopulations (e.g., HIV positive patients);
- (11) Reported analyses of manufacturing cohorts;
- (12) Reported associations with NHL as a second primary;
- (13) Reported results of studies in which exposure was assessed using biological markers.

2.3. Data Extraction

We extracted the following information from the full text of each eligible paper:

- author;
- publication year;
- study location;

- study design (case-control or cohort);
- source population for the controls in case-control studies;
- whether case-control studies were matched, and if so, the matching factors;
- diagnosis period if a case-control study or cancer follow-up period if a cohort study;
- number of cohort participants or number of cases and controls;
- cancer definition or ICD codes used to identify the cancers;
- method of assessing exposure;
- exposure metrics and definitions;
- referent categories used in the analysis;
- active ingredient(s) and/or chemical group(s) studied;
- covariates entered into the model to adjust for confounding;
- type of effect estimate reported;
- number of exposed participants;
- effect estimates and confidence interval limits; and
- gender restrictions, if any.

We also identified papers that were related to each other (e.g., pooled analyses that used data that were analyzed and reported on previously, papers that reported on different analyses from the same study, studies that were follow up analyses of the same population). In cases of related papers, we used a specific set of rules to decide which effect estimate to report and use in the meta-analyses; this rule is described in Section 2.5.

2.4. Chemical Group Classification

We reported results for all chemical groups for which there was information from the available literature. We did not consider exposures to chlorophenols in this paper, since much of the exposure to this chemical group comes from non-agricultural settings. We classified pesticide active ingredients into chemical groups based on Alan Wood's classification system [13].

2.5. Reporting of Results for the Systematic Review

From every relevant paper, we extracted an effect estimate for each active ingredient and/or chemical group. We extracted results for associations with NHL, and when available, for associations with subtypes of NHL.

We used the following algorithm to determine which effect estimates to use:

- (1) For related papers that examined the same exposure/outcome association, we used the results from the most complete and updated analysis with the greatest number of participants;
- (2) If more than one exposure definition was considered and reported, we used the definition that best represented agricultural exposures (e.g., we selected results for farmers who worked with phenoxy herbicides, instead of results for herbicide applicators, gardeners, or landscapers);
- (3) The various papers used different confounder adjustment sets, which were selected based on different criteria. In an effort to use the most unbiased estimate, we extracted the most adjusted effect estimate;

- (4) Most papers defined exposure dichotomously. Papers that reported results according to more than two categories used a variety of definitions for the exposure metrics, including duration of use, days/year of use, time since first exposure, and cumulative days of exposure. Because the definitions and metrics used to define categories varied, it was not possible to combine estimates based on multiple categories of exposure in formal meta-analyses. Therefore, for the meta-analyses, we used the result for the dichotomously defined exposure with the greatest number of exposed cases. To assess dose-response relationships, we qualitatively examined results in association with multiple categories;
- (5) Some papers only reported results in association with multiple categories of exposure. We extracted these results for the systematic review, since they can be used to qualitatively evaluate trends in association of NHL with active ingredient or chemical group and are important for identifying dose-response relationships;
- (6) Some studies only reported estimates of association between pesticide exposures and subtypes of NHL. We abstracted these estimates for presentation and analysis of association of pesticide exposures with NHL subtypes.

We present results from the systematic review sorted by chemical group and, within chemical group, by active ingredient.

2.6. Meta Analysis

2.6.1. Grouping

When possible, we conducted separate meta-analyses for each chemical group and active ingredient. We conducted meta-analyses for associations of these pesticides with NHL and NHL subtypes. Although we abstracted results according to dichotomous exposure and multiple levels of exposure, we conducted formal meta-analyses for dichotomously categorized exposures only.

2.6.2. Analytic Methods

Because we identified a variety of sources of heterogeneity between papers, we decided a priori to calculate meta- risk ratio (RR) estimates and 95% confidence intervals (CIs) using random effect models, allowing between study heterogeneity to contribute to the variance [14,15]. We report I^2 values, which represent the percentage of the total variance explained by study heterogeneity and measure inconsistency in results. Larger I^2 values indicate greater inconsistency [15]. We did not perform formal heterogeneity tests; Cochran's Q statistic has been shown to have low power to detect true heterogeneity across studies, especially in meta-analyses that include a small number of papers [15]. Following recommendations for meta-analyses of observational studies, we also identified possible sources of heterogeneity and used sensitivity analyses to evaluate these, as described in Section 2.6.3 [16]. We evaluate the meta- estimates of association based on the magnitude of the point estimate and interpret the associated 95% CIs as indicators of precision. To aid this interpretation, we have calculated and reported confidence limit ratios (CLRs), which are the ratio of the upper to the lower CI limit [17]. We also present forest plots for meta-analyses to which five or more papers contributed.

2.6.3. Sensitivity Analysis

We conducted sensitivity analyses to evaluate robustness of our results to the following sources of heterogeneity: study design (case-control versus cohort), gender (male only versus both genders), geographic area, decade of cancer diagnosis, and source of the controls in case-control studies (population-based versus hospital).

One paper presented results of analyses of women only [18]. Thus, we were not able to conduct a sensitivity analysis for analyses of women; we were able to conduct sensitivity analyses using papers that reported results for men and for men and women. Only two papers reported estimates of association from studies in which controls were drawn from hospitals, and these two studies reported associations of NHL with different pesticides. Therefore, our sensitivity analysis of the control source in case-control studies was restricted to controls drawn from the population. Data from only one cohort study contributed to our meta-analyses. Therefore, we could not restrict meta-analyses to cohort studies only.

The geographic areas that we investigated separately in sensitivity analyses were North America, the United States, Europe, and Sweden. We selected these because there was more than one study within each area that investigated associations of NHL with a particular pesticide. In addition to maintaining Sweden and the United States in sensitivity analyses of Europe and North America, respectively, we analyzed results from Sweden separately from the rest of Europe, and results from the United States separately from Canada. We conducted these separate analyses because more than one paper reported effect estimates of association with a pesticide from each of these countries, and because we believed effects might be different when separated from the rest of the continent. Although we identified papers from Australia and New Zealand we were not able to analyze these separately because there was not more than one effect estimate of association with an individual pesticide from either country.

We investigated the following diagnosis periods: 1975–1989, 1990–1999, and year 2000 and later. If any part of the diagnosis period overlapped these periods, we included the estimate from the paper in the sensitivity analysis. We selected these periods based on the periods that appeared in the papers that we reviewed and on the different editions of the ICD coding systems [1].

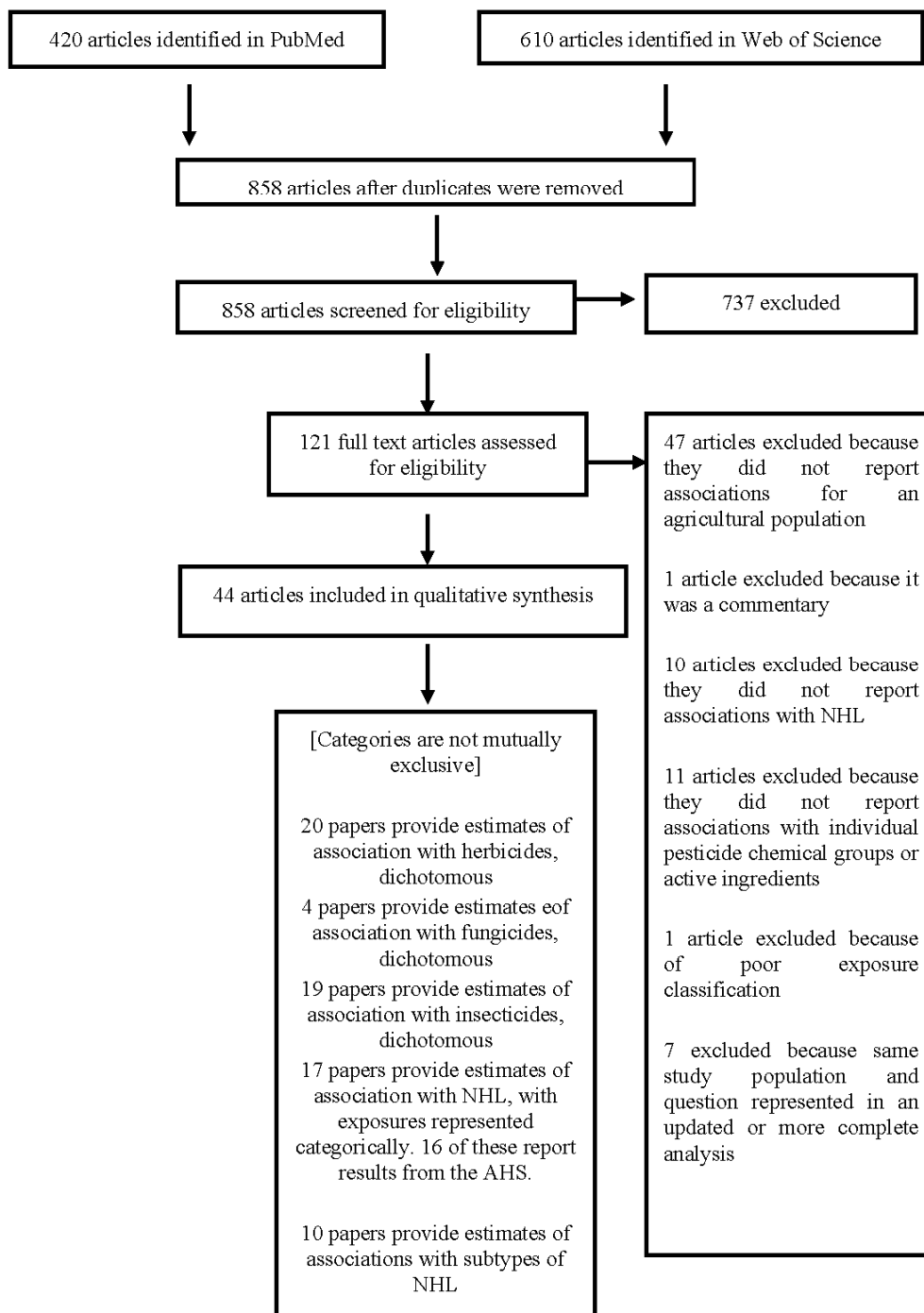
After performing meta-analyses for each active ingredient or chemical group, we repeated analyses, removing studies that differed from the others based on the above-described characteristics. In cases when results from individual studies were also represented in papers that analyzed these data pooled with data from other studies, we performed sensitivity analyses by replacing the results from the pooled analyses with the individual studies, or the individual studies with the results from the pooled analyses.

3. Results

3.1. Systematic Review

The PubMed and Web of Science searches yielded 858 unique articles (Figure 1). After screening the abstracts and titles, we excluded 737 articles. Of the remaining 121 articles, 47 were excluded because they reported results within a non-agricultural population. We decided to exclude non-agricultural populations because the nature of exposure they receive is different compared to agricultural groups. Because of contamination and production of multiple chemicals simultaneously, it is difficult to determine the exact chemical to which manufacturing cohort participants have been exposed.

Figure 1. Flow chart showing the articles that were included and excluded in the systematic review, with reasons for the exclusions.



After excluding 27 additional articles because they did not meet one or more of the inclusion criteria described in the methods section, we included 44 papers in our qualitative synthesis. Of these, 20 papers provided estimates of association with herbicide chemical groups or active ingredients, four papers provided estimates of association with fungicides, and 17 with insecticides.

3.2. Summary of Studies from Which Estimates were Extracted

A summary of the 44 papers from which effect estimates were abstracted is presented in Table 1.

Table 1. Summary of papers from which effect estimates were extracted.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Barry 2012 [19] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2007	53,588	Self-administered questionnaire completed during enrollment and interviewer administered follow-up questionnaire	Referent: No exposure Intensity weighted lifetime exposure days, 15 year lag Intensity weighted lifetime exposure days, no lag Referent: Non-farmers	No	Age, gender, race, state of residence, applicator type, enrollment year, cigarette smoking, alcohol consumption, education, family history of cancer, 5 most correlated pesticides	Methyl bromide	No
Baris 1998 [20] Iowa, Kansas, Minnesota, Nebraska, USA	Pooled analysis of 3 CC studies	Population	Matched by race, gender, age, and vital status at the time of interview, year of death for controls matched to deceased cases	Dx period ¹ : 1979–1983	993 cases/2, 918 controls	Telephone interviews (Kansas and Nebraska, USA), In-person interviews (Iowa and Minnesota)	Used vs. did not use on crops and animals , Used vs. did not use on crops, Used vs did not use on animals Duration of use, in years (1-4, 5-9, ≥10) Days/year of use (≤5, >5)	Yes	Age, state of residence	DDT	Yes
Beane Freeman 2005 [21] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2007	23,106	Two self-administered questionnaires	Referent: No exposure Lifetime exposure days Intensity weighted exposure days	Yes	Age, smoking, education, family history of cancer, state of residence, total days of any pesticide application	Diazinon	No
Beane Freeman 2011 [22] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2007	36,357	A self-administered questionnaire	Referent 1: No exposure Referent 2: Lowest quartile of exposure Lifetime days of exposure Intensity weighted lifetime days of exposure	No	Age, state, license type, gender, smoking status, alcohol consumption, education, use of most highly correlated pesticides	Atrazine	Yes

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Blair 1998 [23] Iowa, Kansas, Minnesota, Nebraska, USA	CC	Population	Matched by race, gender, age, vital status at the time of interview	Dx period ¹ : 1979–1983	987 cases/2,895 controls	Telephone interviews (Kansas and Nebraska, USA), In-person interviews (Iowa and Minnesota)	Referent: nonfarmer Farmers who ever used Days/year of use (≤4 days, ≥5 days) First lindane use (≥20 years ago, <20 years ago)	Yes	Age, proxy/direct interview, state of residence	Lindane	Yes
Bonner 2010 [24] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2005	44,624	Self-administered questionnaires	Referent 1: Nonexposed Referent 2: Lowest tertile of exposure Intensity weighted lifetime exposure days	No	Age, gender, education, family history of cancer, smoking, alcohol, year of enrollment, state of residence, correlated pesticides	Terbufos	No
Bonner 2005 [25] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2001	49,877	Self-administered questionnaire	Referent 1: Nonexposed Referent 2: Lowest tertile of exposure Lifetime exposure days Intensity weighted lifetime exposure days	No	Age, gender, education, family history of cancer, smoking, alcohol, year of enrollment, state of residence, exposure to correlated pesticides	Carbofuran	No
Bonner 2007 [26] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2002	19,717	Self-administered questionnaire	Referent 1: Nonexposed Referent 2: Lowest tertile of exposure Lifetime exposure days, Intensity weighted lifetime exposure days	No	Age, gender, smoking, alcohol, education, family history of cancer, year of enrollment, state of residence	Malathion	No

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Cantor 1992 [27] Iowa and Minnesota, USA	CC	Population	Matched by 5-year age group, vital status at time of interview, and state of residence	Dx period ¹ : 1979–1983	622 cases/1,245 controls	In-person interviews	Referent: Non-farmers Ever handled, Handled prior to 1965 Handled without protective equipment	Yes	Age, vital status, state, cigarette smoking, family history of lymphohematopoietic cancer, high risk occupations, high risk exposures	2,4-D, 2,4,5-T, alachlor, atrazine, aldrin, bentazon, butylate, carbofuran, carbaryl, chlordane, chloramben, copper acetoarsenate, cyanazine, coumaphos, diazinon, dicamba, dichlorvos, DDT, famphur, Flyspray, fonofos, glyphosate, heptachlor, lindane, malathion, methoxychlor, metribuzen, nicotine, phorate, popachlor, rotenone, toxaphene, trifluralin, turbufos,	No
Cocco 2013 [28] Multicentre; Czech Republic, France, Germany, Italy, Ireland, Spain	CC	Population (German and Italian centers), Hospital (Czech Republic, French, Irish, Spanish centers)	Matched by gender, 5-year age group, and residence area	1998–2004	2,348 cases/2,462 controls	Structured in-person interviews conducted by trained interviewers, jobs were coded by industrial hygienists; industrial hygienists and occupational experts reviewed the questionnaires and job modules to assess exposures to pesticides (with the help of a crop exposure matrix)	Referent: Never exposed Ever exposed, by level of industrial hygienists’s degree of confidence that the participant was truly exposed to the agent: Any level of confidence High confidence	No	Age, gender, education, study center	Carbamates, OPs, OC, Triazines and triazoles, phenoxy acids, chlorophenols, mancozeb, methomyl, dimethoate, glyphosate, DDT, endosulfan, 2,4-D, MCPA	Only reported for subtypes
Delancey 2009 [29] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2004	23,072	Two self-administered questionnaires	Referent: Lowest tertile of exposure Lifetime exposure days Intensity weighted lifetime exposure days	Yes	Age, smoking, alcohol consumption, education, family history of cancer, state of residence, exposure to all pesticides	Metribuzin	No

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
de Roos 2003 [30] Iowa, Kansas, Minnesota, Nebraska, USA	CC	Population	Matched by race, gender, age, vital status at the time of interview	Dx period ¹ : 1979–1983	650 cases/1,933 controls	Telephone interviews (Kansas and Nebraska, USA), In-person interviews (Iowa and Minnesota)	Referent: Not exposed Exposed	Yes	Age, study site, use of all other pesticides	Aldrin, bufencarb, carbaryl, carbofuran, chlordane, copper acetoarsenite, coumaphos, DDT, diazinon, dichlorvos, dieldrin, dimethoate, ethoprop, famphur, fly/tick/lice spray, fonofos, heptachlor, lead arsenate, lindane, malathion, methoxychlor, nicotine, phorate, pyrethrins, rotenone, tetrachlorvinphos, toxaphene, terbufos, alachlor, atrazine, bentazon, butylate, chloramben, cyanazine, 2,4-D, dicamba, EPTC, glyphosate, linuron, MCPA, metolachlor, metribuzin, paraquat, propachlor, sodium chlorate, 2,4,5-T, trifluralin	No
de Roos 2005 [31] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2001	54,315	Self-administered questionnaire	Referent 1: Never used Referent 2: Lowest tertile of exposure Ever used Cumulative exposure days Intensity weighted exposure days	No	Age at enrollment, education, cigarette smoking, alcohol consumption, family history of cancer, state of residence, other pesticides	Glyphosate	No
Eriksson 2008 [32] Sweden	CC	Population	Matched in 10 year age and gender groups to mirror the age and gender distribution of the cases	Dx period: 1999–2002	1,163 cases/1,016 controls	Telephone interview on life style factors and diseases; Self-administered questionnaire on work history and chemical exposures; follow up telephone interviews to collect incomplete data	Referent: Never exposed Ever exposed, Days of exposure (categorized at the median of the exposure distribution),	No	Age, gender, year of Dx/enrollment	Phenoxyacetic acids, MCPA, 2,4,5-T and/or 2,4-D, glyphosate	Yes

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Hardell 2002 [33] Sweden	CC, pooled analysis of two studies, one of hairy cell lymphoma and one of NHL	Population	Matched by age and county	Dx period: 1987–1990 (NHL); 1987–1992 (hair cell lymphoma)	515 cases/1,141 controls	Self-administered questionnaire supplemented by telephone interviews by a trained interviewer when information was unclear	Referent 1: Not exposed	Yes	Study, study area, vital status, age	Phenoxy acids, MCPA, 2,4-D + 2,4,5-T, glyphosate, DDT, mercurial seed dressing, pyrethrins, arsenic	No
							Ever exposure, High exposure (>median number of days for exposed participants) Low exposure (<median number of days for exposed participants)				
Hoar 1986 [34] Kansas, USA	CC	Population	Matched by age and vital status	Dx period: 1976–1982	170 cases of NHL/948 controls (no. included in NHL analysis unclear)	Telephone interviews, with questions on years living/working on a farm, and herbicides/insecticides used.	Referent: Non-farmers	Yes	Age	Phenoxyacetic acids, Triazine herbicides, Amide herbicides, Benzoic herbicides, Carbamate herbicides, Trifluralin herbicides, Uracil herbicides	No
							Ever use, Duration of use (years), Frequency of use (days/year), First year of use				

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype	
Kang 2008 [35]	Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2002	50,127	Self-administered questionnaires completed during enrollment and interviewer administered follow-up questionnaires	Referent 1: Nonexposed Referent 2: Lowest tertile of exposure	No	Age at enrollment, education, cigarette smoking, alcohol consumption, family history of cancer, state of residence, top five most highly correlated pesticides	Trifluralin	No
Koutros 2009 [36]	Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2004	49,398	Self-administered questionnaire	Referent: Nonexposed Intensity weighted lifetime exposure days	No	Age, year of enrollment, race	Imazethapyr	No
Koutros 2008 [37]	Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2004	49,762	Self-administered questionnaire	NA	No	Not applicable, since an adjusted effect estimate for an association with NHL was not reported	Dichlorvos	No
Lee 2004 [38]	Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2001	54,383	Self-administered questionnaire	Referent 1: Nonexposed Lifetime exposure days, Intensity weighted lifetime exposure days	No	Age, gender, alcohol consumption, smoking history, educational level, family history of cancer, year of enrollment, state of residence, use of 4 correlated pesticides	Chlorpyrifos	No
Lee 2004 [39]	Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2000	49,980	Self-administered questionnaire	Referent 1: Nonexposed Exposed, Referent 2: Lowest quartile of exposure Lifetime exposure days, Intensity weighted lifetime exposure days	No	Age, sex, alcohol, smoking, education, family history of cancer, enrollment year, state of residence, 5 correlated pesticides	Alachlor	No

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype	
Lynch 2009 [40]	Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2004	19,655	Self-administered questionnaire	Referent 1: Nonexposed Referent 2: Lowest tertile of exposure	No	Age at enrollment, gender, race, smoking status, education, family history of cancer, atrazine, 5 most correlated pesticides	Butylate	No
Lynch 2006 [41]	Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2002	50,800	Self-administered questionnaire	Referent: Lowest tertile of exposure ¹	No	Age, race, gender, alcohol consumption, smoking status, education level, family history of cancer, state of residence, 5 most correlated pesticides	Cyanazine	No
Mahajan 2007 [42]	Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2003	21,416	Self-administered questionnaire	Referent 1: Nonexposed Referent 2: Lowest tertile of exposure	No	Age, smoking, gender, state of residence, use of 4 correlated pesticides	Carbaryl	No
McDuffie 2001 [43]	Six Canadian provinces	CC	Population	Frequency matched by age and province of residence	Dx period: 1991–1994	517 cases/1,506 controls	Self-administered postal questionnaire followed by telephone interview with participants who had 10 or more hours of pesticide use in lifetime plus a 15% random sample of those with fewer than 10 hours pesticide use	Referent: Not exposed Exposed, Frequency of exposure (days/year)	Yes	Age, province of residence	2,4-D, mecoprop, MCPA, DiclofopmethylGlyphosate, phosphonic acids, phenoxy herbicides, thiocarbamates, diallate, dicamba, dinitroaniline, trifluralin, carbaryl, carbofuran, methomyl, carbamate insecticides, organochlorine insecticides, chlordane, lindane, aldrin, methoxychlor, DDT, Captan, vitavax, aldehyde, formaldehyde, mercury dust, mercury liquid, malathion, carbon tetrachloride	

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Miligi 2006 [44] Italy	CC	Population	Stratified by gender and 5-year age groups	Dx period: 1991–1993	1,145 cases/1,232 controls	In-person interviews, including questions on crops grown and whether pesticides were used combined with exposure matrix	Reference: Those who never worked in agriculture Overall exposure, Probability of use >low and lack of protective equipment	No	Age, gender, area	Phenoxy herbicides, 2,4-D, MCPA	No
Mills 2005 [45] California	CC	Same source as the cases (United Farm Workers of America cohort)	Matched by gender, hispanic ethnicity and +/- one year of birth	Dx period: 1988–2001	60 cases/300 controls	Work histories combined with exposure matrix	Reference: Low use High use	No	Age, gender, length of union affiliation, date of first union affiliation	Methyl bromide, diazinon, malathion, dichloro-propane, captan, simazine, chlothalonil, mancozeb, methyl parathion, nitrofen, propyzamide, toxaphene, trifluralin, 2,4-D, maneb Organochlorine insecticides, organophosphorus insecticides, pyrethrin, carbamate fungicides, imide fungicides, triazole fungicides, phenoline herbicides, phenoxy herbicides, picoline herbicides, triazine herbicides, amide herbicides, urea herbicides, quaternary ammonium herbicides, glyphosate	No
Orsi 2009 [46] France	CC	Hospital	Matched by center, age +/- 3 year, gender	2000–2004	244 cases/436 controls	Self-administered questionnaires, followed by face to face interviews with trained staff, and review of interviews by experts to verify logical consistency with pesticide product availability, geographic location, etc.	Reference: Nonexposed Exposed	No	Age, center, socioeconomic characteristic (white collar vs blue collar)	Organochlorine insecticides, organophosphorus insecticides, pyrethrin, carbamate fungicides, imide fungicides, triazole fungicides, phenoline herbicides, phenoxy herbicides, picoline herbicides, triazine herbicides, amide herbicides, urea herbicides, quaternary ammonium herbicides, glyphosate	Yes
Pahwa M 2012 [47] Six Canadian provinces	CC	Population	Frequency matched by age and province of residence	Dx period: 1991–1994	513 cases/506 controls	Self-administered postal questionnaire followed by telephone interview with participants who had 10 or more hours of pesticide use in lifetime plus a 15% random sample of those with fewer than 10 hours pesticide use	Reference: No use Use	Yes	Age, province of residence, respondent type (self or proxy), diesel oil exposure	OC insecticides, DDT, OP insecticides, malathion, phenoxy herbicides, MCPA, mecoprop, 2,4-D	No

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Pearce 1987 [48] New Zealand	CC	Cancer registry	Matched by year of cancer registration and age (± 2 years)	Dx period: 1977–1981	183 cases/338 controls	Telephone interviews	Reference: Nonexposed Used any agricultural chemical spray in a farming setting	Yes	Decade of birth, type of interview respondent (self or relative)	Phenoxy herbicides	No
Persson 1989 [49] Sweden	CC	Population	Unmatched	Dx period: 1964–1986	106 cases/275 controls	Self-administered questionnaire	Reference: Not exposed Exposed	No	Age, date of Dx, gender, farming, exposure to fresh wood, other exposures associated with at least a doubled risk for hodgkins disease or NHL	Phenoxy herbicides, DDT	No
Persson 1993 [50] Sweden	CC	Population	Unmatched	Dx period: 1975–1984	93 cases/204 controls	Self-administered questionnaires	Reference: Not exposed Exposed	No	Age, other exposures investigated with OR ≥ 2 or significantly below unity and with at least 5 exposed subjects	Phenoxy herbicides, DDT	No
Purdue 2007 [51] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2002	51,011	Self-administered questionnaire	Reference 1: Never use/unexposed Ever use Lifetime days of exposure Intensity weighted lifetime days of exposure	No	Age, sate, gender, education level, smoking status, alcohol use, family history of cancer, lifetime days of total pesticide application	OC insecticides, aldrin, chlordane, DDT, dieldrin, heptachlor, lindane, toxaphene	No
Rafnsson 2006 [52] Iceland	CC	Non-cases from cohort of sheep owners	Unmatched	Dx period: 1966–2003	45 cases/221 controls	Records of sheep owned, used as a proxy measure for dermal exposure from sheep dipping; sheep dipping used as a proxy for exposure to hexa-chlorocyclohexane, which is a mixture of different isomers containing around 15% lindane. <100 sheep owned was used to indicate unexposed	Referent: <100 sheep ≥ 100 sheep , Categories of number of sheep owned: 100-199 sheep, 200-683 sheep	Yes	Age	Hexachlorocyclohexane	No

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Rusiecki 2009 [53] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2004	49,093	Self-administered questionnaire	Referent: Nonexposed Lifetime days of exposure Intensity weighted	No	Age, gender, race, family history of cancer, cigarette smoking, state of residence, enrollment year	Permethrin	No
Rusiecki 2006 [54] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2002	50,193	Self-administered questionnaire	Referent: Lowest tertile of exposure Lifetime days of exposure Intensity weighted lifetime days of exposure	No	Age, gender, race, smoking, alcohol, applicator status, family history of cancer, sate of residence, most highly correlated pesticides	Metolachlor	No
van Bommel 2008 [55] Iowa and North Carolina, USA	C (AHS)	NA	NA	1993–2004	48,378	Self-administered questionnaire	Referent: No exposure Lifetime days of exposure Intensity weighted lifetime days of exposure	Yes	Age, race, smoking, alcohol use, applicator type, family history of cancer, state of residence, total days of pesticide use	EPTC	No
Waddell 2001 [56] Iowa, Kansas, Minnesota, Nebraska, USA	Pooled analysis of 3 CC studies	Population	Matched by race, gender, age, and vital status at the time of interview, year of death for controls matched to deceased cases	Dx period ¹ : 1979–1983	748 cases/2,236 controls	Telephone interviews (Kansas and Nebraska, USA), In-person interviews (Iowa and Minnesota)	Referent: Non-farmers Ever Used First used Years used Days/year of use Protective gear	Yes	Age, state of residence, respondent type (proxy or direct)	OP insecticides, dichlorvos, trichlorfon, dimethoate, diazinon, disulfoton, ethoprop, malathion, phorate, terbufos, chlorpyrifos, coumaphos, crufomate, runnel, tetrachlorvinphos, fensulfothion, famphur, fonofos, parathion	Yes

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Woods 1987 [57] Washington state, USA	CC	Population	Matched by vital status and 5-year age group	Dx period: 1981–1984	746 cases/910 controls	In-person interviews about occupational history and self-reported chemical exposure	Referent: No exposure Farming exposures to phenoxy herbicides Any exposure to DDT Any exposure to chlordane Estimated intensity of occupational exposure to phenoxy herbicides: Low/medium/high	Yes	Age	Phenoxy herbicides, DDT, Chlordane	No
Zahm 1990 [58] Nebraska, USA	CC	Population	Matched by race, gender, vital status, age	Dx period: 1983–1986	201 cases/725 controls	In-person interviews about agricultural pesticide use	Referent: Never lived or worked on a farm Mixed or applied Days/year mixing or applying Years used on a farm First year of use Referent: Non-farmers	Yes	Age	2,4-D	No
Zahm 1993 [59] Iowa, Kansas, Minnesota, Nebraska, USA	Pooled analysis of 3 CC studies	Population	Matched by race, gender, age, vital status at the time of interview	Dx period ¹ : 1979–1983	993 cases/2,918 controls	Telephone interviews (Kansas and Nebraska, USA), In-person interviews (Iowa and Minnesota)	Used atrazine ¹ Personally handled Used but did not handle Duration of use (years) Days/year handled Year of first use	Yes	Age, state	Atrazine	Yes

Table 1. Cont.

Author, year, location	Design	Source for controls	Matching	Diagnosis or follow-up period (cancer)	No. Participants	Exposure assessment	Referent category for exposure, exposure definition(s)/metric	Men only	Adjustment set	Pesticides	Reported results by subtype
Zahm 1993 [18] Nebraska, USA	CC	Population	Matched by race, gender, vital status, and age (5 year age groups)	Dx period: 1983–1986	119 cases/471 controls	In-person interviews about agricultural pesticide use	Referent: women who never lived or worked on a farm Used on farm	No (women only)	Age	Phenoxy herbicides, triazine herbicides, amide herbicides, benzoic acid herbicides, carbamate herbicides, trifluralin herbicides, chlorinated hydrocarbons, carbamate insecticides, OP insecticides	No
Zheng 2001 [60] Nebraska, USA, Iowa and Minnesota, Kansas	Pooled analysis of 3 CC studies	Population	Matched by gender, age, race, vital status, state of residence	Dx period ¹ : 1979–1983	985 cases/2,895 controls	In-person interviews about agricultural pesticide use	Referent: Non-farmers Used Personally handled Year since first use Years of use Days/year of use	Yes	Age, type of respondent (proxy or direct), state of residence, first-degree family history of cancer, use of hair dye, use of private wells, tobacco smoking	Carbaryl, carbamate herbicides, carbamate insecticides	Yes

Notes: 2,4-D, 2,4-Dichlorophenoxyacetic acid; 2,4,5-T, 2,4,5-Trichlorophenoxyacetic acid; AHS, Agricultural Health Study; C, cohort study; CC, case-control study; DDT, dichlorodiphenyltrichloroethane; DX, Diagnosis; EPTC, s-ethyl dipropylthiocarbamate; MCPA, 2-methyl-4-chlorophenoxyacetic acid; OC, organochlorine; OP, organophosphorus; ¹ Diagnosis period varied by state: July 1983–June 1986 (Nebraska, USA), October 1980–September 1982 (Minnesota), March 1981–October 1983 (Iowa), 1979–1981 (Kansas).

3.2.1. Studies Conducted in the United States

Nineteen papers [19,21,22,24–26,29,31,35,36,38–42,51,53–55] report results from analyses of data from the Agricultural Health Study, which is a prospective cohort study of licensed pesticide applicators and their spouses living in Iowa and North Carolina, USA. Enrollment began in 1993 and the study is still ongoing [61]. The number of participants included in the analyses varied due to exclusions and completeness of exposure data. The last year of follow-up was defined by the last date on which the incident cancers were identified. At enrollment, participants completed a questionnaire in which they provided historical data on exposure to pesticides. They were also given a take home questionnaire to complete. Most analyses of the Agricultural Health Study data classified active ingredient exposures using two metrics: (1) lifetime exposure days, defined as number of years of use x number of days used per year; and (2) intensity-weighted lifetime exposure days, which was defined as years of use x number of days used per year x personal protective equipment use x intensity level, which incorporates factors that modify pesticide exposure, such as mixing status, application method, equipment repair status. Four papers [31,38,39,51] also reported associations using ever/never use categories; we used these estimates in the meta-analyses.

Six papers reported results from pooled analyses of three case-control studies that were conducted by the USA National Cancer Institute [20,23,30,56,59,60], in Iowa and Minnesota, Kansas, and Nebraska. Diagnosis periods for NHL ranged from 1979 to 1986, depending upon the study. In all studies, population based controls were frequency matched to cases by race, sex, age, and vital status at the time of the interview, and lifetime exposure to pesticides was assessed via telephone interviews. Using these pooled data, De Roos *et al.* [30] examined associations of NHL with 47 active ingredients. The authors investigated pesticides for which there was exposure data from all three studies and to which at least 20 participants were exposed. They used standard logistic regression to model the association of NHL with the multiple pesticides, simultaneously. These analyses were restricted to participants with complete information on all of the pesticides. Other papers reported results from analyses of these pooled data. Baris *et al.* [20] examined associations with dichlorodiphenyltrichloroethane (DDT), Blair *et al.* [23] with lindane, Zahm *et al.* [59] with atrazine, Waddell *et al.* [56] with organophosphates, and Zheng *et al.* [60] with carbamates. We also extracted results from analyses of the individual studies. Using data from the study in Iowa and Minnesota, Cantor *et al.* [27] examined associations with multiple pesticides. In Kansas, Hoar *et al.* [34] examined associations with exposures to various herbicides. In Nebraska, Zahm *et al.* [58] examined associations with 2,4-Dichlorophenoxyacetic acid (2,4-D).

In a population based case-control study in western Washington State, USA Woods *et al.* [57], examined associations between phenoxy exposure and NHL. Controls were group matched to cases diagnosed 1981–1984, based on vital status and age. Lifetime occupational histories and self-reported pesticide chemical exposures were ascertained using in-person interviews. The authors reported exposure to phenoxy herbicides by occupational type. We extracted the result for farming exposure to phenoxy herbicides. Exposures to DDT and chlordane were reported as ever/never, but they were not stratified by occupation.

We also extracted results from a USA based case-control study nested in a cohort of primarily Hispanic members of the California farm worker labor union [45]. Cases were diagnosed 1988–2001.

Controls were selected from the same cohort as cases and matched on the basis of gender, Hispanic ethnicity, and year of birth. Pesticide exposure was defined as low *versus* high use, with the category cut-points based on the distribution of use of the top 15 pesticides. To estimate exposure, union job history data that described crops farmed in a given month/year and county was combined with data collected by the California Pesticide Databank that describes pesticides used on a crop in a given county and time period.

3.2.2. Canadian Studies

Two papers reported results from the Cross-Canada Study of Pesticides and Health, which was a case control study conducted in six Canadian provinces [43,47]. Population based controls were frequency matched to NHL cases, diagnosed 1991–1994, based on age and province of residence. Detailed information on specific pesticide use was ascertained by telephone interviews. The questionnaires used for this study were based on the one used in the USA National Cancer Institute led case-control studies [20,23,30,56,59,60] in Nebraska [18,58] and Kansas [34]. McDuffie *et al.* [43] and Pahwa *et al.* [47] present results from some of the same analyses with the same population. When the same analysis was reported in both papers we selected the effect estimate from the paper by Pahwa *et al.* [47] because the authors excluded four NHL cases based on pathology review that occurred subsequent to the analyses reported in McDuffie *et al.* [43].

3.2.3. European Studies

Four papers [32,33,49,50] reported results from distinct case-control studies conducted in Sweden. The papers by Eriksson *et al.* [32] and Hardell *et al.* [33] reported analyses from population based case-control studies; case diagnosis periods were 1999–2002 and 1987–1992, respectively. A complete lifetime occupational and chemical exposure history was ascertained using self-administered questionnaires followed by telephone interviews when clarification was needed. The two studies by Persson *et al.* [49,50] report results from unmatched population based case-control studies; the results reported from the paper published in 1993 [50] were performed in an adjacent region of Sweden to the area represented in the earlier paper [49]. They examined the association of NHL with various occupational exposures, including phenoxy herbicides and DDT. Case diagnosis periods were 1964–1986 and 1975–1984, respectively.

We extracted results from papers that report results from analyses of data collected in France [46], Italy [44], Iceland [52], and multiple European centers that form parts of the EPILYMPH study [28]. All of these studies were case-control in design. In France [46], cases (diagnosed 2000–2004) and controls were recruited in the same hospitals. Exposure was assessed using self-administered questionnaires, followed by face-to-face interviews in which participants reported information about farms on which they worked for a minimum of six months; they reported information about location, period, crops and animals farmed, name of pesticides mixed or sprayed, duration and number of pesticide applications. Pesticide exposure was classified as possible or definite; the referent category included people never exposed to the pesticide. In the Italian study [44], cases were diagnosed from 1991 to 1993. Participants were interviewed about agricultural work, crop diseases, pesticides used to treat diseases, frequency of pesticide treatments, period of treatment, protective equipment used,

means of application, and re-entry tasks. Exposure was classified into low, medium, and high probabilities of use. The Icelandic case-control study [52] was nested in a cohort of male sheep owners. The authors included cases diagnosed 1966–2003. Paper records on sheep dipping in hexachlorocyclohexane, an organochlorine insecticide that contains lindane, were used as a proxy measure for exposure; records were available for the period 1962–1980. Number of sheep owned was used as a surrogate measure for exposure. In the EPILYMPH study [28], in-person interviews were conducted to ascertain detailed job histories, including information about farm size, crops farmed, pests treated, types and frequency of pesticides used, protective equipment, and re-entry tasks. Industrial hygienists classified pesticide exposure as possible, probable, or certain. In analysis, contrasts were made between high confidence of ever lifetime exposure *versus* never exposure, and any level of confidence of ever exposure *versus* never exposure.

3.2.4. Studies from Australia and New Zealand

Only two papers reported results from analyses of studies conducted outside of North America and Europe. Pearce *et al.* [48] reported analyses of data from a New Zealand based case-control study of agricultural exposures. Cases were diagnosed 1977–1981. Telephone interviews were used to ascertain lifetime occupational history and work with chemicals (phenoxy herbicides). In analysis, Pearce *et al.* [48] stratified phenoxy herbicide exposure by occupation (farming, forestry, railway work, *etc.*). We extracted the estimate of association with any phenoxy herbicide exposure in farming occupations. In Australia [62], Fritschi *et al.* enrolled incident NHL cases diagnosed between 2000 and 2001. They matched controls to cases based on age, gender, and region of residence. In structured telephone interviews, participants provided occupational histories. Occupational hygienists reviewed the responses to these questions and, with the help of a pesticide crop matrix, assigned likelihood of exposure to pesticides (probable, possible, no exposure), level of exposure, and frequency of exposure. These assignments were combined to classify participants' lifetime amount of exposure (substantial, meaning the person was probably exposed to the substance at a medium or high level for more than five 8-h days per year for a combined total of five years, nonsubstantial, or none).

3.2.5. Gender

Nineteen of the papers reported results from analyses that were restricted to men only [20,21,23,27–30,33,34,43,47,48,52,55–60]. One paper reported results from an analysis that was restricted to women [18]. The other papers reported results from analyses of study populations with men and women; in the analytic models reported in these papers, gender was treated as a confounder.

3.2.6. Covariates

In all papers, age was included in models to adjust for potential confounding. Location (state of residence, study center) was also a common adjustment factor. Other variables that were included in models as covariates were race, smoking status, alcohol consumption, correlated pesticides, education level, year of study enrollment, family history of cancer (all cancers or lympho-hematopoetic),

other environmental risk factors for NHL (e.g., gasoline exposure), and type of respondent to the interview used for exposure assessment (direct or proxy).

3.2.7. Reference Groups

In the majority of papers reviewed, the reference group contained farmers and non-farmers who were not exposed to the pesticide. However, there were exceptions to this, either because of study design or analytic decisions.

By design, all participants in the Agricultural Health Study were either pesticide applicators or spouses of applicators. Most of the analyses from this cohort contrasted exposed participants with two different referent groups: (1) participants with no exposure to the pesticide; and (2) participants in the lowest category of exposure. Similarly, all of the participants in the California based study reported in Mills *et al.* [45] were farm workers. The referent group in this analysis consisted of those with estimated low use of the pesticide being analyzed. Both cases and controls in the Icelandic study on which Rafnsson *et al.* [52] reported were sheep owners; people who owned <100 sheep made up the reference group.

By contrast, in some papers, the authors defined the reference group as those who neither worked nor lived on a farm. Miligi *et al.* [44] defined the referent group as participants who never worked in agriculture. Similarly, in papers reporting analyses of the case-control studies in Iowa, Minnesota, Nebraska, and Kansas, the referent group was defined as participants who never worked or lived on a farm. The exception to this was the paper by De Roos *et al.* [30]; the authors used pooled data from these case-control studies but defined the referent group as farmers and non-farmers who never used the pesticide being considered.

3.2.8. Exposure Period and Definition

Pesticide exposure periods and definitions varied, also. For the most part, papers investigated associations of NHL with ever lifetime pesticide exposure. However, some were more specific in their definition, and not all papers used the ever lifetime exposure metric.

In the cohort of California based union farm workers, Mills *et al.* [45] assessed pesticide exposure in the two to three year decade period prior to cancer diagnosis or enrollment. In Canada, McDuffie *et al.* [43] and Pahwa *et al.* [47] defined pesticide exposure as ever *versus* never lifetime use of pesticides for at least 10 h. In Sweden, Eriksson *et al.* [32] and Hardell *et al.* [33] required participants to have worked with the pesticide for a minimum of eight hours in a day, and the pesticide exposure was required to have occurred at least one year prior to the time of diagnosis or enrollment. Persson *et al.* [49,50] only classified as exposed those participants who were exposed to the chemical for at least one year, five to 45 years prior to case diagnosis. In the Italian study described by Miligi *et al.* [44], an agricultural pesticide questionnaire was only administered to participants who had worked on a farm for at least six months; presumably, therefore, anyone who had worked with pesticides but worked on a farm for less than six months was excluded from the exposed group. In the Icelandic study that Rafnsson *et al.* [52] described, records on sheep ownership, which were used to estimate lindane exposure, were available for the period 1962–1980; however, the cancer diagnosis period was 1966–2003.

3.3. Individual Effect Estimates and Dose Response Relationships

Table 2 presents effect estimates from studies in which chemical exposures were represented using multiple categories. Strong dose response relationships were generally absent; most analyses that examined associations with multiple categories of exposure derived imprecise estimates with wide confidence intervals. McDuffie *et al.* [43] and Eriksson *et al.* [32] observed increased odds of NHL in association with a greater number of days/year of glyphosate exposure. De Roos *et al.* [31] did not observe a similar relationship in analyses of Agricultural Health Study data. McDuffie *et al.* [43] observed elevated effect estimates in association with exposure to 2,4-D; however, they did not observe a dose-response relationship with days/year exposed. In analyses of Agricultural Health Study data, Lynch *et al.* [40] observed a nearly three-fold increase in the rate of NHL among those with ≥ 26 lifetime- and intensity-weighted exposure days to butylate, although the rate ratio comparing those with one to 25 lifetime exposure days to non-exposed applicators was close to the null.

Table 2. Effect estimates from studies that investigated associations between non-Hodgkin lymphoma and herbicides, insecticide, and fungicide exposures classified using multiple categories.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
HERBICIDES					
Amide herbicides					
Lee 2004 [39]	Alachlor	<u>Lifetime exposure days</u> ¹		Rate ratio, 95% CI:	
		Quartile 1, 0.1–19.9	5	1.0, Referent	
		Quartile 2, 20.0–56.0	4	0.6, 0.1–2.5	
		Quartile 3, 56.1–116.0	8	1.5, 0.4–5.4	
		Quartile 4, ≥116.1	10	1.1, 0.3–4.4	
					P for trend: 0.5
		<u>Intensity weighted exposure days</u> ¹			
		Quartile 1, 0.1–101.9	5	1.0, Referent	
		Quartile 2, 102.0–253.1	3	0.6, 0.1–3.4	
		Quartile 3, 253.2–710.4	10	2.4, 0.7–8.8	
Quartile 4, ≥710.5	9	1.4, 0.3–6.1			
			P for trend: 0.4		
Rusiecki 2006 [54]	Metolachlor	<u>Lifetime exposure days</u> ¹		Rate ratio, 95% CI:	
		Tertile 1, ≤20	14	1.0, Referent	
		Tertile 2, 21–56	11	0.8, 0.3–1.7	
		Tertile 3, >56	11	0.7, 0.3–1.7	
					P for trend: 0.5
		<u>Intensity-weighted lifetime exposure days</u> ¹			
		Tertile 1, ≤20	13	1.0, Referent	
		Tertile 2, 21–56	10	0.7, 0.3–1.7	
		Tertile 3, >56	13	1.0, 0.4–2.7	
					P for trend: 0.7

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
Dinitroaniline herbicides					
Kang 2008 [35]	Trifluralin	<u>Lifetime days of exposure</u> ²		Rate ratio, 95% CI	
		Non-exposed	53	1.0, referent	
		Tertile 1, 1-24.4	17	0.9, 0.5–1.5	
		Tertile 2, 24.5-108.4	23	1.0, 0.6–1.8	
		Tertile 3, Lower half, 108.5-224.75	6	0.6, 0.2–1.4	
		Tertile 3, Upper half, >224.75	4	0.6, 0.2–1.7	
					P for trend: 0.2
		<u>Intensity weighted lifetime days</u> ²			
		Tertile 1, 0-162.1	15	0.7, 0.4–1.4	
		Tertile 2, 162.2-593	20	1.1, 0.8–2.9	
		Tertile 3, Lower half, 593.1-1176.0	9	0.9, 0.4–2.0	
Tertile 3, Upper half, >1176.0	4	0.4, 0.1–1.1			
			P for trend: 0.1		
Glyphosate					
McDuffie 2001 [43] ³	Glyphosate	<u>Days/year of exposure</u>		OR, 95% CI:	
		Unexposed	466 cases/1,373 controls	1.0, Referent	
		>0–≤2	28 cases/97 controls	1.0, 0.6–1.6	
		>2	23 cases/36 controls	2.1, 1.2–3.7	
De Roos 2005 [31] ³	Glyphosate	<u>Lifetime days of exposure</u> ²		Rate ratio, 95% CI:	
		Tertile 1, 1–20	29	1.0, Referent	
		Tertile 2, 21–56	15	0.7, 0.4–1.4	
		Tertile 3, 57–2678	17	0.9, 0.5–1.6	
					P for trend: 0.7
		<u>Intensity weighted exposure days</u> ²			
Tertile 1, 0.1–79.5	24	1.0, Referent			
Tertile 2, 79.6–337.1	15	0.6, 0.3–1.1			

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
Eriksson 2008 [32] ³	Glyphosate	Tertile 3, 337.2–1,824.1	22	0.8, 0.5–1.4	
				P for trend: 1.0	
				OR, 95% CI:	
		<u>Days of exposure</u> ⁴			
		>0–≤10 days	12 cases/9 controls	1.7, 0.7–4.1	
		>10 days	17 cases/9 controls	2.4, 1.0–5.4	
Imidazolinone herbicides					
Koutros 2009 [36]	Imazethapyr	<u>Intensity weighted exposure days</u> ⁵		Rate ratio, 95% CI:	
		No exposure:	80	1.0, Referent	
		Tertile 1, <54.1	15	1.0, 0.6–1.7	
		Tertile 2, 54.1–<152.9	13	0.9, 0.5, 1.6	
		Tertile 3, lower half, 152.9–<311.9	7	0.8, 0.3–1.8	
		Tertile 3, upper half, ≥311.9	11	1.4, 0.8–2.7	
				P for trend: 0.4	
Phenoxy herbicides					
Fritschi 2005 [62]	Phenoxy herbicides, group	<u>Degree of pesticide exposure</u> ⁶		OR, 95% CI:	
		None	679 cases/677 controls	1.0, Referent	
		Nonsubstantial	10 cases/14 controls	0.7, 0.3–1.7	
Eriksson 2008 [32] ³	Phenoxy herbicides, group	<u>Days of exposure</u> ⁴	Substantial	5 cases/3 controls	1.8, 0.4–7.4
			>0–≤45 days	32 cases/13 controls	2.8, 1.5–5.5
			>45 days	15 cases/13 controls	1.3, 0.6–2.7
Hardell 2002 [33] ³	Phenoxy herbicides, group			OR, 95% CI:	
		<u>Number of days of exposure</u>			
		Not exposed	NR	1.0, Referent	
		Low	NR	1.7, 1.0–2.7	
		High	NR	1.7, 1.0–2.7	

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
		<u>Years between first exposure and diagnosis</u>		
		1–10	NR	-
		>10–20	NR	2.9, 1.1–7.7
		>20–30	NR	1.5, 0.9–2.8
		>30	NR	1.5, 0.9–2.4
		<u>Years between last exposure and diagnosis</u>		
		1–10	NR	3.2, 1.6–6.7
		>10–20	NR	2.1, 1.0–4.1
		>20–30	NR	1.0, 0.5–1.8
		>30	NR	1.3, 0.6–2.6
		<u>Decade of exposure</u>		
		1940s	4 cases/6 controls	1.5, 0.4–5.2
		1950s	35 cases/53 controls	1.4, 0.9–2.3
		1960s	43 cases/58 controls	1.7, 1.1–2.6
		1970s	32 cases/33 controls	2.4, 1.4–4.0
		1980s	16 cases/33 controls	3.3, 1.5–7.1
Eriksson 2008 [32] ³	MCPA	<u>Days exposed</u> ⁴		
		≤32	15 cases/5 controls	3.8, 1.4–10.5
		>32	6 cases/4 controls	1.7, 0.5–6.0
Hardell 2002 [33] ³	MCPA	OR, 95% CI:		
		<u>Number of days of exposure</u>		
		Not exposed	NR	1.0, Referent
		Low	NR	1.9, 0.8–4.6
		High	NR	3.6, 1.5–9.1
		<u>Years between first exposure and diagnosis</u>		
		1–10	NR	-
		>10–20	NR	5.4, 1.6–21

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
		>20–30	NR	0.9, 0.2–3.0
		>30	NR	3.8, 1.5–10.0
		<u>Years between last exposure and diagnosis</u>		
		1–10	NR	3.5, 1.6–8.0
		>10–20	NR	2.3, 0.6–9.1
		>20–30	NR	0.9, 0.1–4.4
		>30	NR	-
McDuffie 2001 [43] ³	Mecoprop	<u>Days/year exposed</u>		
		Unexposed	464 cases/1,425 controls	1.0, Referent
		>0–≤2	31 cases/48 controls	2.3, 1.4–3.7
		≥2	22 cases/33 controls	2.1, 1.2–3.6
Hardell 2002 [33] ³	2,4-D + 2,4,5-T	<u>Number of days of exposure</u>		
		Low	NR	1.9, 1.1–3.2
		High	NR	1.2, 0.7–2.1
		<u>Years between first exposure and diagnosis</u>		
		1–10	NR	-
		>10–20	NR	2.9, 0.8–11.0
		>20–30	NR	1.9, 1.0–3.5
		>30	NR	1.2, 0.7–1.9
		<u>Years between last exposure and diagnosis</u>		
		1–10	NR	4.3, 1.1–21.0
		>10–20	NR	1.9, 0.9–3.8
		>20–30	NR	0.9, 0.1–4.4
		>30	NR	1.4, 0.7–2.9
Eriksson 2008 [32] ³	2,4,5-T and/or 2,4-D	<u>Days exposed</u> ⁴		
		Non-exposed		OR, 95% CI: 1.0, Referent

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
Zahm 1990 [58] ³	2,4-D	≤29	21 cases/11 controls	2.1, 1.0–4.4	
		>29	12 cases/10 controls	1.3, 0.6–3.1	
		Never lived/worked on a farm	54 cases/184 controls	OR, 95% CI: 1.0, Referent	
		<u>Days/year mixing or applying</u>			
		1–5	16 cases/44 controls	1.2, 0.6–2.4	
		6–20	12 cases/25 controls	1.6, 0.7–3.6	
		21+	3 cases/4 controls	3.3, 0.5–22.1	
		Unknown	12 cases/25 controls	-	
				P for trend: 0.1	
		<u>Years used on farm</u>			
		1–5	3 cases/12 controls	0.9, 0.2–3.6	
		6–15	11 cases/15 controls	2.8, 1.1–7.1	
		16–20	3 cases/18 controls	0.6, 0.1–2.1	
		21+	13 cases/33 controls	1.3, 0.6–2.7	
		Unknown	15 cases/29 controls	-	
				P for trend: 0.3	
		<u>First year of use</u>			
Prior to 1945	8 cases/21 controls	1.4, 0.5–3.5			
1946–1955	13 cases/39 controls	1.1, 0.5–2.3			
1956–1965	5 cases/8 controls	2.1, 0.6–7.7			
1965–1986	4 cases/12 controls	1.3, 0.3–4.9			
Unknown year	13 cases/18 controls	-			
		P for trend: 0.2			
McDuffie 2001 [43] ³	2,4-D	<u>Days/yr exposed</u>		OR, 95% CI:	
		Unexposed	406 cases/1,213 controls	1.0, Referent	
		>0–≤2	55 cases/160 controls	1.2, 0.8–1.6	
		>2–≤5	36 cases/82 controls	1.4, 0.9–2.1	

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
		>5–≤7	9 cases/20 controls	1.4, 0.6–3.2
		>7	11 cases/31 controls	1.2, 0.6–2.5
Thiocarbamate herbicides				
Zheng 2001 [60] ³	Butylate	Non-farmers	243 cases/775 controls	OR, 95% CI
		<u>Years since first use</u>		1.0, Referent
		<20	34 cases/56 controls	1.5, 0.9–2.4
		≥20	4 cases/10 controls	1.1, 0.3–3.7
		<u>Years of use</u>		
		<7	21 cases/35 controls	1.5, 0.9–2.8
		≥7	20 cases/37 controls	1.5, 0.8–2.7
		<u>Days/year of use</u>		
		<5	3 cases/5 controls	2.6, 0.6–11.1
		≥5	2 cases/2 controls	4.7, 0.6–34.5
Lynch 2009 [40]	Butylate	<u>Lifetime exposure days</u> ⁵		Rate ratio, 95% CI:
		No exposure	27	1.0, Referent
		Low exposure, 1–25	6	0.9, 0.4–2.0
		High exposure, ≥26	12	2.9, 1.5–5.8
				P for trend: 0.0
		<u>Intensity weighted exposure days</u> ⁵		
		No exposure	27	1.0, Referent
		Low exposure, 1–157	5	0.8, 0.3–2.0
		High exposure, ≥158	13	2.9, 1.5–5.5
				P for trend: 0.0
Van Bommel 2008 [55]	EPTC	<u>Lifetime exposure days</u> ⁵		Rate ratio, 95% CI:
		No exposure	83	1.0, Referent
		Tertile 1, 1–9	10	1.2, 0.6–2.3
		Tertile 2, 10–49	7	1.5, 0.7–3.2

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
Zheng 2001 [60] ³	EPTC + Protectant	Tertile 3, 50+	5	0.8, 0.3–2.0	
				P for trend:0.7	
		<u>Intensity-weighted lifetime exposure days</u> ⁵		Rate ratio, 95% CI:	
		No exposure	83	1.0, Referent	
		Tertile 1, 1–47	8	1.4, 0.7–2.8	
		Tertile 2, 48–111	4	0.9, 0.3–2.5	
		Tertile 3, 112+	10	1.1, 0.6–2.1	
				P for trend:0.9	
				OR, 95% CI:	
				1.0, Referent	
			Non-farmers:		
			<u>Years since first use</u>		
			<20	19 cases/34 controls	1.7, 0.9–3.1
	≥20	0 cases/1 control	-		
	<u>Years of use</u>				
	<7	15 cases/20 controls	2.2, 1.1–4.4		
	≥7	7 cases/26 controls	1.0, 0.4–2.4		
	<u>Days/year of use</u>				
	<5	7 cases/12 controls	2.2, 0.8–5.8		
	≥5	1 case/5 controls	0.9, 0.1–7.7		
Triazine herbicides					
Lynch 2006 [41]	Cyanazine	<u>Lifetime exposure days</u> ⁵		Rate ratio, 95% CI	
		Tertile 1, 1–16	9	1.0, Referent	
		Tertile 2, 17–56	18	1.6, 0.7–3.5	
		Tertile 3, ≥57	9	1.3, 0.5–3.4	
				P for trend: 1.0	
			<u>Intensity-weighted exposure days</u> ⁵		
	Tertile 1, 1–83	10	1.0, Referent		
	Tertile 2, 84–314.35	12	1.3, 0.6–3.0		

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
Zahm 1993 [59] ³	Atrazine	Tertile 3, ≥315.35	13	1.4, 0.6–3.4 P for trend: 0.5 OR (95% CI not presented)
		No use	445 cases/1507 controls	1.0, Referent
		<u>Years of use</u>		
		1–5	4 cases/14 controls	0.4
		6–15	5 cases/20 controls	0.5
		16–20	5 cases/8 controls	0.6
		≥21	7 cases/11 controls	0.8
		<u>Days/year personally handled</u>		
		1–5	7 cases/20 controls	0.6
		6–20	8 cases/17 controls	0.7
		≥21	1 cases/1 control	1.4
		<u>Year of first use</u>		
		1965 or prior	10 cases/35 controls	0.4
1966 or later	10 cases/18 controls	1.0		
Beane Freeman 2011 [22]	Atrazine	<u>Lifetime days of exposure</u> ⁵		Rate ratio, 95% CI
		Quartile 1, >0–20	41	1.0, Referent
		Quartile 2, 21–56	41	1.1, 0.7–1.7
		Quartile 3, >56–178.5	38	0.9, 0.6–1.5
		Quartile 4, >178.5	32	1.0, 0.6–1.6
				P for trend: 0.7
		<u>Intensity weighted lifetime days of exposure</u> ⁵		
		Quartile 1, >0–20	38	1.0, Referent
		Quartile 2, 21–56	45	1.2, 0.8–1.9
		Quartile 3, >56–178.5	34	0.9, 0.6–1.5
Quartile 4, >178.5	34	0.9, 0.6–1.5		
		P for trend: 0.5		

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
Triazinone herbicides					
Delancey 2009 [29]	Metribuzin	<u>Lifetime days of exposure</u> ⁵			Rate ratio, 95% CI
		No exposure	39		
		Tertile 1, >0–8.75	5	1.0, Referent	
		Tertile 2, 8.76–24.5	6	2.3, 0.6–8.6	
		Tertile 3, >24.5	8	2.6, 0.8–9.1	
					P for trend: 0.1
		<u>Intensity weighted lifetime exposure days</u> ⁵			
		No exposure: 0	39		
		Tertile 1, >0–58.3	4	1.0, Referent	
		Tertile 2, >58.3–174.4	6	1.4, 0.3–5.8	
Tertile 3, >174.5	9	2.5, 0.7–9.6			
			P for trend: 0.1		
FUNGICIDES					
McDuffie 2001 [43] ³	Captan	<u>Days/year exposed</u>		OR, 95% CI:	
		Unexposed	497 cases/1,482 controls	1.0, Referent	
		>0–≤2	11 cases/12 controls	2.7, 1.2–6.2	
		>2	9 cases/12 controls	2.8, 1.1–6.9	
INSECTICIDES					
Carbamate insecticides					
Zheng 2001 [60] ³	Carbaryl	Non-farmers		OR, 95% CI:	
				1.0, Referent	
		<u>Years since first use</u>			
		<20	19 cases/44 controls	1.1, 0.6–2.0	
		≥20	14 cases/21 controls	1.8, 0.9–3.7	
		<u>Years of use</u>			
<7	16 cases/36 controls	1.1, 0.6–2.1			
≥7	15 cases/26 controls	1.5, 0.8–3.0			

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
		<u>Days/year of use</u>		
		<5	9 cases/14 controls	2.4, 1.0–5.9
		≥5	2 cases/4 controls	1.8, 0.3–10.0
Mahajan 2007 [42]	Carbaryl	<u>Lifetime days of exposure</u> ²		Rate ratio, 95% CI
		No exposure	23	1.0, Referent
		Tertile 1, 1–9	5	0.7, 0.2–1.8
		Tertile 2, 10–56	8	1.2, 0.5–3.0
		Tertile 3, >56	10	1.7, 0.6–4.5
				P for trend: 0.3
Zheng 2001 [60] ³	Carbofuran	Nonfarmers	243 cases/775 controls	OR, 95% CI: 1.0, Referent
		<u>Years since first use</u>		
		<20	32 cases/63 controls	1.3, 0.8–2.1
		≥20	15 cases/30 controls	1.6, 0.8–3.1
		<u>Years of use</u>		
		<7	30 cases/48 controls	1.7, 1.0–2.9
		≥7	24 cases/47 controls	1.4, 0.8–2.4
		<u>Days/year of use</u>		
		<5	9 cases/15 controls	2.7, 1.1–6.4
		≥5	12 cases/16 controls	3.1, 1.4–6.8
Bonner 2005 [25]	Carbofuran	<u>Lifetime days of exposure</u> ²		Rate ratio, 95% CI
		No exposure	44	1.0, Referent
		Tertile 1, 1–9	6	0.8, 0.3–1.9
		Tertile 2, 10–56	7	1.3, 0.6–2.9
		Tertile 3, >56	7	1.4, 0.6–3.3
				P for trend: 0.4

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
Organophosphorus insecticides				
Fritschi 2005 [62]	Organophosphorus insecticides, group	<u>Degree of exposure</u> ⁶		OR, 95% CI:
		No exposure	662 cases/660 controls	1.0, Referent
		Nonsubstantial exposure	20 cases/28 controls	0.7, 0.4–1.3
		Substantial exposure	12 cases/6 controls	2.1, 0.8–5.7
Waddell 2001 [56] ³	Organophosphorus pesticides, group	Non-farmers	243 cases/775 controls	OR, 95% CI: 1.0, Referent
		<u>Years since first use</u>		
		<20	44 cases/94 controls	1.0, 0.7–1.5
		≥20	79 cases/188 controls	1.6, 1.1–2.2
		<u>Years used</u>		
		<10	34 cases/69 controls	1.1, 0.7–1.7
		10–19	44 cases/71 controls	1.4, 0.9–2.1
		20+	39 cases/59 controls	1.5, 1.0–2.4
Lee 2004 [38]	Chlorpyrifos	<u>Lifetime days of exposure</u> ¹		Rate ratio, 95% CI:
		Nonexposed	53	1.0, Referent
		Quartile 1, 0.1–8.8	10	0.6, 0.2–1.5
		Quartile 2, 8.9–24.5	13	1.8, 0.9–3.5
		Quartile 3, 24.6–56.0	5	0.9, 0.4–2.4
		Quartile 4, ≥56.1	9	1.0, 0.4–2.4
				P for trend: 0.7
		<u>Intensity-weighted lifetime days of exposure</u> ¹		
		Nonexposed	53	1.0, Referent
		Quartile 1, 0.1–48.9	6	0.9, 0.3–2.2
		Quartile 2, 49.0–135.9	6	0.6, 0.2–1.8
		Quartile 3, 136.0–417.6	10	1.2, 0.6–2.7
		Quartile 4, ≥417.7	10	1.6, 0.7–3.5
				P for trend: 0.4

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
Beane Freeman 2005 [21]	Diazinon	No exposure	26	Rate ratio, 95% CI: 1.0, Referent
		<u>Lifetime days of exposure</u> ²		
		Tertile 1, <20	6	1.8, 0.7–4.4
		Tertile 2, 20–38.8	3	1.4, 0.4–4.6
		Tertile 3, >38.8	2	0.9, 0.2–4.1
				P for trend: 1.0
		<u>Intensity-weighted lifetime days of exposure</u> ²		
		Tertile 1	5	1.9, 0.7–5.1
		Tertile 2	2	0.7, 0.2–3.1
		Tertile 3	4	1.7, 0.6–5.2
Waddell 2001 [56] ³	Diazinon	Non-farmers	243 cases/775 controls	P for trend: 0.4 OR, 95% CI: 1.0, Referent
		<u>Years since first use</u>		
		<20	20 cases/34 controls	1.1, 0.6–2.0
		≥20	16 cases/24 controls	1.4, 0.7–2.7
		<u>Years used</u>		
		<10	20 cases/40 controls	0.9, 0.5–1.7
		10–19	10 cases/11 controls	1.8, 0.7–4.4
		20+	1 cases/1 controls	1.9, 0.1–31.6
		<u>Days/year of use</u>		
		<5	6 cases/11 controls	1.3, 0.5–3.9
≥5	6 cases/6 controls	2.4, 0.7–8.0		

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
Waddell 2001 [56] ³	Fonofos	Non-farmers	243 cases/775 controls	OR, 95% CI: 1.0, Referent
		<u>Years since first use</u>		
		<20	20 cases/36 controls	1.0, 0.6–1.9
		≥20	5 cases/6 controls	1.6, 0.5–5.5
		<u>Years used</u>		
		<10	16 cases/25 controls	1.2, 0.6–2.4
		10–19	7 cases/9 controls	1.5, 0.5–4.1
		20+	2 cases/1 control	4.2, 0.4–47.2
		<u>Days/year of use</u>		
		<5	2 cases/6 controls	0.7, 0.1–3.8
≥5	9 cases/6 controls	3.4, 1.1–10.3		
McDuffie 2001 [43] ³	Malathion	<u>Days/year of exposure</u>		OR, 95% CI:
		Unexposed	445 cases/1,379 controls	1.0, Referent
		>0–≤2	50 cases/88 controls	1.8, 1.3–2.7
		≥2	22 cases/39 controls	1.8, 1.0–3.0
Waddell 2001 [56] ³	Malathion	Non-farmers	243 cases/775 controls	OR, 95% CI: 1.0, Referent
		<u>Years since first use</u>		
		<20	22 cases/46 controls	0.9, 0.5–1.6
		≥20	35 cases/39 controls	1.7, 1.1–2.9
		<u>Years used</u>		
		<10	22 cases/39 controls	1.1, 0.6–1.9
		10–19	23 cases/23 controls	1.9, 1.0–3.5
		20+	10 cases/18 controls	1.1, 0.5–2.4
		<u>Days/year of use</u>		
		<5	7 cases/8 controls	2.1, 0.7–6.1
		≥5	5 cases/7 controls	1.5, 0.5–5.2

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
Bonner 2007 [26]	Malathion	<u>Lifetime days of exposure</u> ⁵		Rate ratio, 95% CI
		No exposure	1.0 Referent	
		Tertile 1, >0–9	0.6, 0.2–1.6	
		Tertile 2, 10–39	0.7, 0.3–1.8	
		Tertile 3, >39	0.8, 0.3–2.0	
		<u>Intensity-weighted lifetime days of exposure</u> ²		Rate ratio, 95% CI
		No exposure	14	1.0, Referent
		Tertile 1, >0–58	5	0.5, 0.2–1.5
		Tertile 2, 59–245	9	0.7, 0.3–1.8
		Tertile 3, >245	9	0.8, 0.3–2.0
Waddell 2001 [56] ³	Phorate	Non-farmers	243 cases/775 controls	P for trend: 0.9 OR, 95% CI: 1.0, Referent
		<u>Years since first use</u>		
		<20	19 cases/43 controls	0.8, 0.4–1.5
		≥20	14 cases/23 controls	1.3, 0.6–2.6
		<u>Years used</u>		
		<10	20 cases/33 controls	1.2, 0.6–2.1
		10–19	9 cases/19 controls	0.9, 0.4–2.1
		20+	4 cases/5 controls	1.5, 0.4–5.9
		<u>Days/year of use</u>		
		<5 days	5 cases/9 controls	1.3, 0.4–4.0
≥5 days	7 cases/8 controls	2.0, 0.7–5.9		
Waddell 2001 [56] ³	Terbufos	Non-farmers	243 cases/775 controls	OR, 95% CI: 1.0, Referent
		<u>Years since first use</u>		
		<20	23 cases/51 controls	0.9, 0.5–1.5
		≥20	0 cases/1 control	-

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
		<u>Years used</u>		
		<10	13 cases/38 controls	0.6, 0.3–1.3
		10–19	6 cases/8 controls	1.5, 0.5–4.4
		20+	0 cases/1 control	-
		<20	23 cases/51 controls	0.9, 0.5–1.5
		≥20	0 cases/1 control	-
		<u>Days/year of use</u>		
		<5	3 cases/8 controls	0.8, 0.2–3.4
		≥5	7 cases/4 controls	4.0, 1.1–14.5
Bonner 2010 [24]	Terbufos	<u>Intensity weighted lifetime exposure days</u> ⁵		Hazard ratio, 95% CI
		No exposure	69	1.0, referent
		Tertile 1, >0–107	17	1.3, 0.7–2.3
		Tertile 2, >107–352	24	1.9, 1.2–3.2
		Tertile 3, >352	15	1.2, 0.7–2.2
				P for trend: 0.6
<u>Organochlorine insecticides</u>				
Fritschi 2005 [62]	Organochlorines, group	<u>Degree of exposure</u> ⁶		OR, 95% CI:
		None	674 cases/679 controls	1.0, Referent
		Nonsubstantial	14 cases/13 controls	1.1, 0.5–2.3
		Substantial	6 cases/2 controls	3.3, 0.7–16.4
Purdue 2007 [51] ³	Organochlorines, group	<u>Lifetime days of exposure</u> ⁵		Rate ratio, 95% CI:
		Unexposed	16	1.0, Referent
		Tertile 1, 1–110	8	1.2, 0.5–2.8
		Tertile 2, 111–450	10	1.5, 0.6–3.5
		Tertile 3, >450	11	1.5, 0.6–3.8
				P for trend: 0.3

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
		<u>Intensity weighted lifetime days of exposure</u> ⁵		
		Unexposed	16	1.0, Referent
		Tertile 1, 1–110	9	1.3, 0.6–3.1
		Tertile 2, 111–450	7	1.1, 0.4–2.9
		Tertile 3, >450	13	1.7, 0.7–4.2
				P for trend: 0.3
Purdue 2007 [51] ³	Aldrin	<u>Lifetime days of exposure</u> ⁵		Rate ratio, 95% CI:
		Unexposed	38	1.0, Referent
		1–20	5	0.8, 0.3–2.1
		>20	4	0.4, 0.1–1.5
				P for trend: 0.2
		<u>Intensity weighted lifetime days of exposure</u> ⁵		
		Unexposed	38	1.0, Referent
		1–20	4	0.6, 0.2–1.9
		>20	5	0.6, 0.2–1.8
				P for trend: 0.4
Purdue 2007 [51] ³	Chlordane	<u>Lifetime days of exposure</u> ⁵		Rate ratio, 95% CI:
		Unexposed	32	1.0, Referent
		1–9	9	1.6, 0.8–3.6
		>9	6	1.8, 0.7–4.6
				P for trend: 0.2
		<u>Intensity weighted lifetime days of exposure</u> ⁵		
		Unexposed	32	1.0, Referent
		1–9	8	1.8, 0.8–4.0
		>9	7	1.6, 0.7–3.9
				P for trend: 0.3
Baris 1998 [20] ³	DDT			OR, 95% CI:
		Non-farmers	243 cases/775 controls	1.0, Referent

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
		<u>Days/year of use</u>		
		≤5	12 cases/35 controls	1.0, 0.5–2.1
		>5	11 cases/15 controls	2.1, 0.9–4.9
		<u>Duration of use in years</u>		
		1–4	36 cases/79 controls	1.0, 0.7–1.6
		5–9	31 cases/53 controls	1.4, 0.8–2.2
		≥15	39 cases/64 controls	1.5, 0.9–2.3
McDuffie 2001 [43] ³	DDT	<u>Days/year of exposure</u>		OR, 95% CI:
		Unexposed	485 cases/1,447 controls	1.0, Referent
		>0–≤2	18 cases/32 controls	1.8, 1.0–3.2
		≥2	14 cases/27 controls	1.5, 0.8–2.9
Hardell 2002 [33] ³	DDT	Never exposed	NR	OR, 95% CI: 1.0, Referent
		<u>Years between first exposure and diagnosis</u>		
		1–10	NR	-
		>10–20	NR	2.6, 0.6–11.0
		>20–30	NR	1.6, 0.8–3.3
		>30	NR	1.2, 0.8–1.7
		<u>Years between last exposure and diagnosis</u>		
		1–10	NR	1.5, 0.7–3.1
		>10–20	NR	1.1, 0.6–2.0
		>20–30	NR	1.5, 0.8–2.5
		>30	NR	1.2, 0.7–2.0

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
Purdue 2007 [51] ³	DDT	<u>Lifetime days of exposure</u> ⁵		Rate ratio, 95% CI:	
		Unexposed	32	1.0, Referent	
		1–20	5	0.7, 0.3–1.9	
		>20	9	1.2, 0.5–2.8	
					P for trend: 0.6
		<u>Intensity weighted lifetime days of exposure</u> ⁵			
		Unexposed	32	1.0, Referent	
		1–20	6	0.9, 0.3–2.2	
		>20	8	1.0, 0.4–2.5	
					P for trend: 0.9
Eriksson 2008 [32] ³	DDT	<u>Days of exposure</u> ⁴			
		≤37 days	20 cases/19 controls	1.2, 0.6–2.2	
		>37 days	30 cases/18 controls	1.8, 1.0–3.2	
Purdue 2007 [51] ³	Dieldrin	<u>Lifetime days of exposure</u> ⁵		Rate ratio, 95% CI:	
		Unexposed	46	1.0, Referent	
		1–20	1	0.6, 0.1–4.2	
		>20	1	0.9, 0.1–6.9	
					P for trend: 0.8
		<u>Intensity weighted lifetime days of exposure</u> ⁵			
		Unexposed	46	1.0, Referent	
		1–20	1	0.7, 0.1–5.0	
>20	1	0.7, 0.1–5.5			
			P for trend: 0.7		

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
Purdue 2007 [51] ³	Heptachlor	<u>Lifetime days of exposure</u>		Rate ratio, 95% CI:	
		Unexposed	38	1.0, Referent	
		1–9	6	1.5, 0.6–4.1	
		>9	4	1.1, 0.4–3.2	
					P for trend: 0.8
		<u>Intensity weighted lifetime days of exposure</u>			
		Unexposed	38	1.0, Referent	
		1–9	4	1.2, 0.4–3.6	
		>9	6	1.4, 0.5–3.7	
					P for trend: 0.6
Blair 1998 [23] ³	Lindane	Nonfarmer	243 cases/775 controls	OR, 95% CI: 1.0, Referent	
		<u>Years since first use</u>			
		≥20	59 cases/83 controls	1.7, 1.1–2.5	
		<20	18 cases/30 controls	1.3, 0.7–2.4	
		<u>Days/ year of use</u>			
		≤4	8 cases/16 controls	1.6, 0.6–4.0	
		≥5	5 cases/8 controls	2.0, 0.6–6.4	
Rafnsson 2006 [52] ³	Lindane	<u>Number of sheep owned</u>		OR, 95% CI:	
		100–199 sheep	22 cases/71 controls	3.8, 1.6–9.3	
		200–683 sheep	15 cases/62 controls	3.4, 1.3–9.0	
Purdue 2007 [51] ³	Lindane	<u>Lifetime days exposed</u> ⁵		Rate ratio, 95% CI:	
		Unexposed	34	1.0, Referent	
		1–22 days	6	1.9, 0.8–4.7	
		>22 days	7	2.1, 0.8–5.5	
					P for trend: 0.1

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI	
Purdue 2007 [51] ³	Toxaphene	<u>Intensity-weighted lifetime days of exposure</u> ⁵			
		Unexposed	34	1.0, Referent	
		1–22	5	0.9, 0.3–3.0	
		>22	8	2.6, 1.1–6.4	
					P for trend: 0.04
		<u>Lifetime days exposed</u> ⁵			Rate ratio, 95% CI:
		Unexposed	35	1.0, Referent	
		1–25 days	10	2.3, 1.1–5.0	
		>25 days	2	1.3, 0.3–5.5	
					P for trend: 0.8
		<u>Intensity-weighted lifetime days of exposure</u> ⁵			
		Unexposed	35	1.0, Referent	
1–25	7	2.3, 1.0–5.4			
>25	5	1.6, 0.5–4.8			
			P for trend: 0.4		
<hr/> Pyrethroid insecticides <hr/>					
Rusiecki 2009 [53]	Permethrin	<u>Lifetime days of exposure</u> ⁵			
		Nonexposed	94	1.0, Referent	
		Tertile 1, ≤8.74	8	0.8, 0.4–1.7	
		Tertile 2, 8.75–50.75	5	0.6, 0.3–1.7	
		Tertile 3, >50.75	5	0.7, 0.3–1.7	
					P for trend: 0.2
		<u>Intensity-weighted lifetime days of exposure</u> ⁵			
		Nonexposed	94	1.0, Referent	
		Tertile 1, ≤8.74	7	0.8, 0.4–1.8	
		Tertile 2, 8.75–50.75	7	0.9, 0.4–2.0	
Tertile 3, >50.75	4	0.5, 0.2–1.3			
			P for trend: 0.2		

Table 2. Cont.

Author, date	Pesticide	Category of exposure	N exposed	Effect estimate, 95% CI
Other insecticides				
Eriksson 2008 [32] ³	Pyrethrin	<u>Days of exposure</u> ⁴		OR, 95% CI:
		≤25	8 cases/5 controls	1.9, 0.6–5.8
	>25	6 cases/5 controls	1.4, 0.4–4.5	
	Mercurial seed dressing	<u>Days of exposure</u> ⁴		
≤12		7 cases/6 controls	1.3, 0.4–3.8	
	>12	14 cases/5 controls	2.9, 1.0–8.3	
Fumigant fungicides				
Barry 2012 [19]	Methyl Bromide	<u>Intensity weighted lifetime days of exposure</u> ⁵		Rate ratio, 95% CI:
		Nonexposed	166	1.0, Referent
		Tertile 1, >0–310	21	2.3, 1.4–3.9
		Tertile 2, 311–1519	8	0.7, 0.3–1.6
		Tertile 3, >1519	6	0.6, 0.3–1.5
				P for trend: 0.1
		<u>Intensity weighted lifetime days of exposure, 15 year lag</u> ⁵		
		Nonexposed	174	1.0, Referent
		Tertile 1, >0–310	13	1.7, 0.9–3.1
		Tertile 2, 311–1519	6	0.6, 0.3–1.5
Tertile 3, >1519	8	1.0, 0.5–2.1		
		P for trend: 0.7		

Notes: CI, confidence interval; EPTC, s-ethyl dipropylthiocarbamate; MCPA, 2-methyl-4-chlorophenoxyacetic acid; NHL, non-Hodgkin lymphoma; OR, odds ratio; CI, confidence interval; ¹ Categories based on mid-points of the questionnaire category; ² Categories based on distribution among users; ³ Effect estimates in association with dichotomous exposure were also reported; ⁴ Categories based on the number of days of exposure among controls; ⁵ Categories based on the distribution of exposure among cancer cases; ⁶ Substantial indicates the person was exposed to the substance at a medium or high level for more than five 8-hour days per year for a combined total of more than 5 years. Non-substantial indicates any other combination of exposures; estimates derive from a case-control study.

Table 3. Associations of subtypes of non-Hodgkin lymphoma with herbicides and insecticides.

	Chemical	Number of exposed cases	Risk ratio, 95% CI
B cell lymphoma			
HERBICIDES			
<u>Organophosphorus herbicides</u>			
Eriksson 2008 [32]	Glyphosate (OP herbicide)	NR	1.9, 1.0–3.5
<u>Phenoxy herbicides</u>			
Cocco 2012 [28]	Phenoxy herbicides	12 cases	1.4, 0.6–3.1
Eriksson 2008 [32]	Phenoxy herbicides	NR	2.0, 1.2–3.3
Fritschi 2005 [62] ¹	Phenoxy herbicides	NR	No exposure: 1.0, Referent Non-substantial exposure: 0.6, 0.3–1.5 Substantial exposure: 1.5, 0.3–6.6
Eriksson 2008 [32]	2,4,5-T and/or 2,4-D (Phenoxy herbicide)	NR	1.7, 0.9–3.0
Cocco 2012 [28]	2,4-D (Phenoxy herbicide)	2 cases	0.6, 0.1–3.5
Cocco 2012 [28]	MCPA (Phenoxy herbicide)	4 cases	Infinity (zero exposed controls)
Eriksson 2008 [32]	MCPA (Phenoxy herbicide)	NR	2.6, 1.1–5.9
<u>Thiocarbamate herbicides</u>			
Zheng 2001 [60]	Butylate (Thiocarbamate herbicides)	4 cases (small lymphocytic)	1.1, 0.3–3.4
Zheng 2001 [60]	EPTC + Protectant (Thiocarbamate herbicides)	2 cases (small lymphocytic)	1.5, 0.3–7.1
Cocco 2012 [28]	Triazines and triazoles	6 cases	0.7, 0.2–1.7
INSECTICIDES			
<u>Carbamate insecticides</u>			
Zheng 2001 [60]	Carbaryl (Carbamate insecticide)	9 cases (small lymphocytic)	2.9, 1.2–7.0
Zheng 2001 [60]	Carbofuran (Carbamate insecticide)	7 cases (small lymphocytic)	1.5, 0.6–3.8
Cocco 2012 [28]	Methomyl (Carbamate insecticide)	0 cases	NR (zero exposed cases)
Cocco 2012 [28]	Mancozeb (Dithiocarbamate fungicide)	2 cases	0.6, 0.1–3.5
Cocco 2012 [28]	Glyphosate (OP herbicide)	4 cases	3.1, 0.6–17.1

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
<i>Organochlorine (OC) insecticides</i>			
Cocco 2012 [28]	Organochlorines	27 cases	0.9, 0.5–1.4
Fritschi 2005 [62] ¹	Organochlorines	NR	No exposure: 1.0, Referent Nonsubstantial: 1.1, 0.5–2.5 Substantial: 3.5, 0.7–17.3
Baris 1998 [20] ²	DDT (OC insecticides)	22 cases	1.6, 0.8–2.9
Eriksson 2008 [32]	DDT (OC insecticide)	NR	1.3, 0.8–2.1
Cocco 2012 [28]	DDT (OC insecticide)	3 cases	1.2, 0.2–5.9
Cocco 2012 [28]	Endosulfan (OC insecticide)	0 cases	NR, zero exposed cases
<i>Organophosphorus insecticides</i>			
Cocco 2012 [28]	Organophosphates	23 cases	1.4, 0.8, 2.6
Zheng 2001 [60] ²	Organophosphates	18 cases	1.6, 0.8–3.2
Fritschi 2005 [62] ¹	Organophosphates	NR	No exposure ¹ : 1.0, Referent Non-substantial: 0.6, 0.3–1.2 Substantial: 2.1, 0.8–5.7
Cocco 2012 [28]	Dimethoate (OP insecticide)	3 cases	1.8, 0.3–10.6
Waddell 2001 [56] ²	Fonofos (OP insecticide)	5 cases	2.6, 0.8–8.5
Waddell 2001 [56] ²	Malathion (OP insecticide)	10 cases	1.9, 0.8–4.7
Waddell 2001 [56] ²	Diazinon (OP insecticide)	9 cases	2.8, 1.1–7.3
Waddell 2001 [56] ²	Phorate (OP insecticides)	8 cases	2.3, 0.9–6.0
Waddell 2001 [56] ²	Terbufos (OP insecticides)	5 cases	2.2, 0.7–7.4
<i>Other insecticides</i>			
Eriksson 2008 [32]	Pyrethrine (Botanical insecticide)	NR	1.7, 0.7–3.9
Eriksson 2008 [32]	Mercurial seed dressing	NR	1.8, 0.8–3.9

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
Mature B cell lymphoma			
Beane Freeman 2011 [22]	Atrazine (Triazine herbicide)	Lifetime days of exposure:	
		Quartile 1, >0–20: 36	1.0, Referent
		Quartile 2, 21–56: 34	1.0, 0.7–1.7
		Quartile 3, >56–178.5: 31	0.9, 0.5–1.4
		Quartile 4, >178.5: 28	0.9, 0.6–1.6
			P for trend: 0.8
		Intensity weighted lifetime days of exposure:	
		Quartile 1, >0–20: 34	1.0, Referent
		Quartile 2, 21–56: 38	1.1, 0.7–1.8
		Quartile 3, >56–178.5: 25	0.8, 0.5–1.3
Quartile 4, >178.5: 31	0.9, 0.6, 1.5		
	P for trend: 0.7		
Diffuse large B cell lymphoma			
<i>HERBICIDES</i>			
<u><i>Organophosphorus herbicides</i></u>			
Eriksson 2008 [32]	Glyphosate (OP herbicides)	NR	1.2, 0.4–3.4
<u><i>Phenoxy herbicides</i></u>			
Cocco 2012 [28]	Phenoxy herbicides	4 cases	1.7, 0.5–5.2
Eriksson 2008 [32]	Phenoxy herbicides	NR	2.2, 1.1–4.3
Fritschi 2005 [62] ¹	Phenoxy herbicides	NR	No exposure ¹ : 1.0, Referent Nonsubstantial exposure: 0.5, 0.1–2.0 Substantial exposure: 2.2, 0.4–13.1
Eriksson 2008 [32]	MCPA (Phenoxy herbicide)	NR	3.9, 1.5–10.5
Eriksson 2008 [32]	2,4,5-T and/or 2,4-D (Phenoxy herbicide)	NR	1.7, 0.7–3.8

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
<i>Thiocarbamate herbicides</i>			
Zheng 2001 [60]	Butylate (Thiocarbamate herbicides)	15 cases	1.6, 0.9–3.1
Zheng 2001 [60]	EPTC + Protectant (Thiocarbamate herbicides)	10 cases	1.8, 0.8–3.7
<i>Triazine herbicides</i>			
Cocco 2012 [28]	Triazines and triazoles	2 cases	0.8, 0.2–3.4
Beane Freeman 2011 [22]	Atrazine (Triazine herbicides)	<u>Lifetime exposure days:</u> Quartile 1, >0–20: 20 Quartile 2, 21–56: 14 Quartile 3, >56–178.5: 14 Quartile 4, >178.5: 11	1.0, Referent 0.8, 0.4–1.6 0.7, 0.4–1.5 0.7, 0.3–1.6 p for trend:0.5
		<u>Intensity-weighted lifetime exposure days:</u> Quartile 1, >0–20: 15 Quartile 2, 21–56: 18 Quartile 3, >56–178.5: 11 Quartile 4, >178.5: 15	1.0, Referent 1.2, 0.6–2.5 0.8, 0.4–1.7 1.1, 0.5–2.3 p for trend:0.96
Zahm 1993 [59]	Atrazine (Triazine herbicides)	66 cases	1.6, 1.1–2.2
INSECTICIDES			
<i>Carbamate insecticides</i>			
Zheng 2001 [60]	Carbaryl (Carbamate insecticides)	15 cases	1.5, 0.8–2.8
Zheng 2001 [60]	Carbofuran (Carbamate insecticides)	24 cases	1.6, 1.0–2.7

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
<i>Organochlorine insecticides</i>			
Cocco 2012 [28]	Organochlorines	5 cases	0.6, 0.2–1.6
	Organochlorines	NR	No exposure ¹ : 1.0, Referent
Fritschi 2005 [62] ¹			Non-substantial exposure: 1.2, 0.4–3.4
			Substantial exposure: 1.6, 0.2–18.1
Eriksson 2008 [32]	DDT (OC insecticide)	NR	1.2, 0.6–2.5
Baris 1998 [20]	DDT (OC insecticide)	53 cases	1.2, 0.8–1.7
<i>Organophosphorus insecticides</i>			
Cocco 2012 [28]	Organophosphates	5 cases	1.1, 0.4–2.9
Waddell 2001 [56]	Organophosphates	63 cases	1.8, 1.2–2.6
Fritschi 2005 [62]	Organophosphates	NR	No exposure ¹ : 1.0, Referent
			Non-substantial exposure: 0.6, 0.3–1.6
			Substantial exposure: 2.1, 0.6–7.7
Waddell 2001 [56]	Fonofos (OP insecticide)	10 cases	1.3, 0.6–2.7
Waddell 2001 [56]	Malathion (OP insecticide)	19 cases	1.1, 0.6–1.9
Waddell 2001 [56]	Diazinon (OP insecticide)	13 cases	1.2, 0.6–2.4
Waddell 2001 [56]	Phorate (OP insecticide)	10 cases	0.8, 0.4–1.8
Waddell 2001 [56]	Terbufos (OP insecticide)	7 cases	0.8, 0.4–2.0
<i>Other insecticides</i>			
Cocco 2012 [28]	Arsenicals	2 cases	0.4, 0.1–1.6
Eriksson 2008 [32]	Pyrethrine (Botanical insecticide)	NR	1.3, 0.3–4.6
Eriksson 2008 [32]	Mercurial seed dressing	NR	2.2, 0.8–6.1
Chronic lymphocytic leukemia			
<i>HERBICIDES</i>			
Cocco 2012 [28]	Phenoxy acids	<u>Ever vs. never exposed</u> 2 cases ever exposed	0.9, 0.2–4.1
		<u>Intensity of exposure</u> Unexposed: 362 cases	1.0, Referent

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
		Low: 0 cases Medium/high: 2 cases	2.4, 0.4–13.8
Cocco 2012 [28]	Triazines and triazoles	2 cases	0.9, 0.2–4.1
INSECTICIDES			
Cocco 2012 [28]	Arsenicals	15 cases	1.6, 0.8–2.9
Cocco 2012 [28]	Carbamates		
Cocco 2012 [28]	Organochlorines	<u>Ever vs never exposed</u> 10 cases ever exposed <u>Intensity of exposure</u> Unexposed: 362 cases Low: 5 cases Medium/high: 5 cases	1.2, 0.6–2.5 1.0, Referent 1.8, 0.6–5.0 1.0, 0.4–2.8
Cocco 2012 [28]	Organophosphates	<u>Ever vs never exposed</u> 9 cases ever exposed <u>Intensity of exposure</u> Unexposed: 362 cases Low: 5 cases Medium/high: 4 cases	2.7, 1.2–6.0 1.0, Referent 2.7, 0.9–7.8 2.6, 0.7–9.2
Lymphocytic lymphoma			
HERBICIDES			
<u>Organophosphorus herbicides</u>			
Eriksson 2008 [32]	Glyphosate (OP herbicide)	NR	3.4, 1.4–7.9
<u>Phenoxy herbicides</u>			
Eriksson 2008 [32]	Phenoxy herbicides	NR	2.1, 1.0–4.5
Cocco 2013 [28]	Phenoxy herbicides	NR	0.9, 0.2–4.1

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
Eriksson 2008 [32]	2,4,5-T and/or 2,4-D (Phenoxy herbicides)	NR	1.9, 0.9–4.4
Eriksson 2008 [32]	MCPA (Phenoxy herbicides)	NR	2.6, 0.7–9.0
INSECTICIDES			
<u>Organochlorine insecticides</u>			
Eriksson 2008 [32]	DDT (OC insecticides)	NR	1.4, 0.7–2.8
<u>Organophosphorus insecticides</u>			
Fritschi 2005 [62] ¹	Organophosphates	NR	No exposure: 1.0, Referent Non-substantial exposure: 1.1, 0.5–2.3 Substantial exposure: 4.3, 1.4–13.0
<u>Other insecticides</u>			
Eriksson 2008 [32]	Pyrethrine (Botanical insecticide)	NR	2.4, 0.7–7.9
Eriksson 2008 [32]	Mercurial seed dressing	NR	2.9, 1.0–8.3
Follicular lymphoma			
HERBICIDES			
<u>Organophosphorus herbicides</u>			
Eriksson 2008 [32]	Glyphosate (OP herbicide)	NR	1.9, 0.6–5.8
<u>Phenoxy herbicides</u>			
Eriksson 2008 [32]	Phenoxy herbicides	NR	1.3, 0.4–3.8
Fritschi 2005 [62] ¹	Phenoxy herbicides	NR	No exposure: 1.0, Referent Non-substantial exposure: 0.5, 0.1–2.0 Substantial exposure: 1.2, 0.1–11.2
Eriksson 2008 [32]	2,4,5-T and/or 2,4-D (Phenoxy herbicide)	NR	1.2, 0.4–4.2
Eriksson 2008 [32]	MCPA (Phenoxy herbicide)	NR	No exposed cases
<u>Thiocarbamate herbicides</u>			
Zheng 2001 [60]	Butylate (Thiocarbamate herbicides)	17 cases	1.5, 0.8–2.8
Zheng 2001 [60]	EPTC + Protectant use (Thiocarbamate herbicides)	10 cases	1.7, 0.8–3.8

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
<i>Triazine herbicides</i>			
Zahm 1993 [59]	Atrazine (Triazine herbicide)	40 cases	1.3, 0.9–1.9
Beane Freeman 2011 [22]	Atrazine (Triazine herbicide)	Lifetime exposure days, by quartile:	
		Quartile 1, >0–20: 10	1.0, Referent
		Quartile 2, 21–56: 8	0.9, 0.3–2.2
		Quartile 3, >56–178.5: 6	0.6, 0.2–1.7
		Quartile 4, >178.5: 8	1.0, 0.4–2.6
			p for trend: 0.9
		Intensity-weighted exposure days:	
		Quartile 1, >0–20: 10	1.0, Referent
		Quartile 2, 21–56: 10	1.0, 0.4–2.4
		Quartile 3, >56–178.5: 8	0.8, 0.3–2.1
		Quartile 4, >178.5: 4	0.4, 0.1–1.3
			p for trend: 0.07
<i>INSECTICIDES</i>			
<i>Carbamate insecticides</i>			
Zheng 2001 [60]	Carbaryl (Carbamate insecticides)	14 cases	1.3, 0.6–2.4
Zheng 2001 [60]	Carbofuran (Carbamate insecticides)	22 cases	1.4, 0.8–2.4
<i>Organochlorine insecticides</i>			
Fritschi 2005 [62] ¹	Organochlorines	NR	No exposure: 1.0, Referent Non-substantial exposure: 1.8, 0.7–4.8 Substantial exposure: 3.5, 0.5–25.2
Eriksson 2008 [32]	DDT (OC insecticide)	NR	2.1, 1.1–4.4
Baris 1998 [20]	DDT (OC insecticide)	47 cases	1.3, 0.8–1.9
<i>Organophosphorus insecticides</i>			
Waddell 2001 [56]	OP pesticides, group	50 cases	1.3, 0.9–2.0
Waddell 2001 [56]	Fonofos (OP insecticide)	14 cases	1.2, 0.6–2.4
Waddell 2001 [56]	Malathion (OP insecticide)	29 cases	1.3, 0.8–2.2

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
Waddell 2001 [56]	Diazinon (OP insecticide)	17 cases	1.3, 0.7–2.3
Waddell 2001 [56]	Phorate (OP insecticide)	10 cases	0.7, 0.3–1.4
Waddell 2001 [56]	Terbufos (OP insecticide)	9 cases	0.7, 0.3–1.6
Eriksson 2008 [32]	Mercurial seed dressing	NR	3.6, 1.2–10.9
Eriksson 2008 [32]	Pyrethrine (Botanical insecticide)	NR	2.6, 0.8–8.5
T cell lymphoma			
HERBICIDES			
<u>Organophosphorus herbicides</u>			
Eriksson 2008 [32]	Glyphosate (OP insecticide)	NR	2.3, 0.5–10.4
<u>Phenoxy herbicides</u>			
Eriksson 2008 [32]	Phenoxy herbicides	NR	1.6, 0.4–7.3
Eriksson 2008 [32]	2,4,5-T and/or 2,4-D (Phenoxy herbicides)	NR	1.0, 0.1–8.0
Eriksson 2008 [32]	MCPA (Phenoxy herbicides)	NR	2.4, 0.3–20.0
INSECTICIDES			
Eriksson 2008 [32]	DDT (OC insecticide)	NR	2.9, 1.1–8.0
Eriksson 2008 [32]	Mercurial seed dressing	NR	2.1, 0.3–17.1
Eriksson 2008 [32]	Pyrethrine (Botanical insecticide)	NR	2.2, 0.3–17.8
Unspecified NHL			
HERBICIDES			
<u>Organophosphorus herbicides</u>			
Eriksson 2008 [32]	Glyphosate (OP insecticide)	NR	5.6, 1.4–22.0
<u>Phenoxy herbicides</u>			
Eriksson 2009 [32]	Phenoxy herbicides	NR	3.8, 1.2–12.1
Eriksson 2008 [32]	2,4,5-T and/or 2,4-D (Phenoxy herbicide)	NR	3.2, 0.9–12.1
Eriksson 2008 [32]	MCPA (Phenoxy herbicide)	NR	9.3, 2.1–41.2
INSECTICIDES			
Eriksson 2008 [32]	DDT (OC insecticide)	NR	2.4, 0.8–7.4
Eriksson 2008 [32]	Mercurial seed dressing	NR	5.4, 1.3–22.0

Table 3. Cont.

Author, date	Chemical	Number of exposed cases	Risk ratio, 95% CI
Eriksson 2008 [32]	Pyrethrine (Botanical insecticide)	NR	3.1, 0.4–26.3
Other specified B cell lymphoma			
HERBICIDES			
<u>Organophosphorus herbicides</u>			
Eriksson 2008 [32]	Glyphosate (OP herbicide)	NR	1.6, 0.5–5.0
<u>Phenoxy herbicides</u>			
Eriksson 2008 [32]	Phenoxy herbicides	NR	2.6, 1.2–5.6
Eriksson 2008 [32]	2,4,5-T and/or 2,4-D (Phenoxy herbicide)	NR	2.2, 0.9–5.4
Eriksson 2008 [32]	MCPA (Phenoxy herbicide)	NR	3.2, 1.0–10.7
INSECTICIDES			
Eriksson 2008 [32]	DDT (OC insecticide)	NR	1.3, 0.6–3.1
Eriksson 2008 [32]	Mercurial seed dressing	NR	2.4, 0.7–7.8
Eriksson 2008 [32]	Pyrethrine	NR	1.5, 0.3–6.9
Unspecified B cell lymphoma			
HERBICIDES			
<u>Organophosphorus herbicides</u>			
Eriksson 2008 [32]	Glyphosate (OP herbicide)	NR	1.5, 0.3–6.6
<u>Phenoxy herbicides</u>			
Eriksson 2008 [32]	Phenoxy herbicides	NR	1.1, 0.3–4.0
Eriksson 2008 [32]	2,4,5-T and/or 2,4-D (Phenoxy herbicide)	NR	0.9, 0.2–3.9
Eriksson 2008 [32]	MCPA (Phenoxy herbicide)	NR	1.4, 0.2–11.2
INSECTICIDES			
Eriksson 2008 [32]	DDT (OC insecticide)	NR	0.2, 0.0–1.8
Eriksson 2008 [32]	Mercurial seed dressing	NR	No exposed cases

Notes: 2,4-D, 2,4-Dichlorophenoxyacetic acid; 2,4,5-T, 2,4,5-Trichlorophenoxyacetic acid; DDT, dichlorodiphenyltrichloroethane; EPTC, s-ethyl dipropylthiocarbamate; MCPA, 2-methyl-4-chlorophenoxyacetic acid; NHL, non-Hodgkin lymphoma; NR, Not reported; OC, Organochlorine; OP, Organophosphorus;

¹ Substantial indicates the person was exposed to the substance at a medium or high level for more than five 8-hour days per year for a combined total of more than 5 years.

Nonsubstantial indicates any other combination of exposures; estimates derive from a case-control study; ² NHL subtype is labeled small lymphocytic in the paper.

In the Agricultural Health Study, Delancey *et al.* [29] observed a fairly strong dose response relationship between exposure to metribuzin, a triazinone herbicide, and NHL (P for trend: 0.13). Waddell *et al.* [56] observed a dose-response relationship between years of use of the organophosphorus insecticide fonofos and NHL. These authors also observed a strong positive relationship between days/year of exposure to another organophosphorus insecticide, terbufos, and NHL (OR, 95% CI for ≥ 5 days vs. non-farmers: 4.0, 1.1–14.5).

Table 3 shows estimates of association between subtypes of NHL and chemical groups or active ingredients. Table 4 shows the individual effect estimates of associations with herbicides, fungicides, and insecticides, coded dichotomously.

Table 4. Effect estimates from papers that investigated associations between non-Hodgkin lymphoma and herbicide, fungicide, and insecticide exposures, categorized dichotomously.

Author, date	N exposed	Risk ratio, 95% CI
HERBICIDES		
Amide herbicides		
<i>Amide herbicides, group</i>		
Hoar 1986 [34]	8 cases/22 controls	2.9, 1.1–7.6
Cantor 1992 [27]	58 cases/114 controls	1.2, 0.8–1.7
Zahm 1993 [18] ¹	8 cases/34 controls	0.9, 0.4–2.2
Orsi 2009 [46]	5 cases/12 controls	0.9, 0.3–2.8
<i>Alachlor</i>		
De Roos 2003 [30]	68 cases/152 controls	1.1, 0.7–1.7
Lee 2004 [39] ²	29 cases	0.7, 0.5–1.1
<i>Metolachlor</i>		
De Roos 2003 [30]	13 cases/37 controls	0.7, 0.3–1.6
<i>Propachlor</i>		
De Roos 2003 [30]	20 cases/50 controls	1.0, 0.5–2.0
<i>Propyzamide</i>		
Mills 2005 [45]	NR	0.7, 0.3–1.4
Organophosphorus herbicides		
<i>Glyphosate</i>		
McDuffie 2001 [43]	51 cases/133 controls	1.2, 0.8–1.7
Hardell 2002 [33]	8 cases/8 controls	3.0, 1.1–8.5
De Roos 2003 [30]	36 cases/61 controls	2.1, 1.1–4.0
De Roos 2005 [31] ²	71 cases	1.1, 0.7–1.9
Eriksson 2008 [32]	29 cases/18 controls	2.0, 1.1–3.7
Orsi 2009 [46]	12 cases/24 controls	1.0, 0.5–2.2
<i>Phosphonic acid</i>		
McDuffie 2001 [43]	63 cases/147 controls	1.4, 0.9–1.9
Phenoxy herbicides		
<i>Phenoxy herbicides, group</i>		
Hoar 1986 [34]	24 cases/78 controls	2.2, 1.2–4.1
Pearce 1987 [48]	81 cases/143 controls	1.0, 0.8–1.4
Woods 1987 [57]	NR	1.3, 0.9–2.0
Persson 1989 [49]	6 cases/6 controls	4.9, 1.0–23.5

Table 4. Cont.

Author, date	N exposed	Risk ratio, 95% CI
Cantor 1992 [27]	118 cases/231 controls	1.2, 0.9–1.6
Persson 1993 [50]	10 cases/14 controls	2.3, 0.2–2.8
Zahm 1993 [18] ¹	14 cases/63 controls	0.9, 0.4–1.7
Hardell 2002 [33]	64 cases/90 controls	1.7, 1.2–2.3
Miligi 2006 [44]	32 cases/28 controls	1.1, 0.6–1.8
Eriksson 2008 [32]	47 cases/26 controls	2.0, 1.2–3.4
Orsi 2009 [46]	11 cases/25 controls	0.9, 0.4–1.9
Pahwa 2012 [47]	129 cases/138 controls	1.5, 1.1–1.9
<u>2,4-D</u>		
Zahm 1990 [58]	43 cases/98 controls	1.5, 0.9–2.5
Cantor 1992 [27]	Ever handled: 115 cases/227 controls	1.2, 0.9–1.6
Cantor 1992 [27] ³	Handled prior to 1965: 86 cases/153 controls	1.3, 0.9–1.8
Mills 2005 [45]	NR	3.8, 1.9–7.8
Miligi 2006 [44]	17 cases/18 controls	0.9, 0.5–1.8
Pahwa 2012 [47]	110 cases/293 controls	1.3, 1.0–1.7
<u>2,4,5-T</u>		
De Roos 2003 [30]	Ever handled: 25 cases/63 controls	1.0, 0.5–1.9
Cantor 1992 [27] ³	Handled prior to 1965: 13 cases/18 controls	1.7, 0.8–3.6
<u>2,4,5-T and/or 2,4-D</u>		
Eriksson 2008 [32]	33 cases/21 controls	1.6, 0.9–3.0
<u>Diclofop-methyl</u>		
McDuffie 2001 [43]	9 cases/25 controls	1.0, 0.4–2.2
<u>MCPA</u>		
Hardell 2002 [33]	21 cases/23 controls	2.6, 1.4–4.9
De Roos 2003 [30] ¹	8 cases/16 controls	1.0, 0.4–2.6
Miligi 2006 [44]	18 cases/19 controls	0.9, 0.4–1.8
Eriksson 2008 [32]	21 cases/9 controls	2.8, 1.3–6.2
Pahwa 2012 [47]	17 cases/46 controls	1.1, 0.6–2.0
Carbamate/Thiocarbamate herbicides		
<u>Carbamate/Thiocarbamate herbicides, group</u>		
Zahm 1993 [18] ¹	2 cases/14 controls	0.6, 0.1–2.8
McDuffie 2001 [43]	21 cases/49 controls	1.5, 0.8–2.6
Zheng 2001 [60]	60 cases/108 controls	1.5, 1.1–2.3
<u>Butylate</u>		
Cantor 1992 [27] ³	Handled prior to 1965: 1 case/6 controls	0.5, 0.1–4.3
Zheng 2001 [60]	45 cases/76 controls	1.6, 1.0–2.4
<u>Diallate</u>		
McDuffie 2001 [43]	11 cases/29 controls	1.5, 0.7–3.1
<u>EPTC + Protectant</u>		
Zheng 2001 [60]	23 cases/49 controls	1.6, 0.9–2.7

Table 4. Cont.

Author, date	N exposed	Risk ratio, 95% CI
Aromatic acid herbicides		
<i>Benzoic acid herbicides</i>		
Hoar 1986 [34]	1 case/2 controls	4.0, 0.1–62.6
Cantor 1992 [27]	53 cases/98 controls	1.3, 0.9–1.9
Zahm 1993 [18] ¹	4 cases/12 controls	1.2, 0.3–4.4
<i>Chloramben</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 16 cases/19 controls	2.0, 1.0–4.0
De Roos 2003 [30]	34 cases/81 controls	0.9, 0.5–1.6
<i>Dicamba</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 7 cases/7 controls	2.8, 1.0–8.1
McDuffie 2001 [43]	26 cases/50 controls	1.6, 1.0–2.6
De Roos 2003 [30]	39 cases/79 controls	1.2, 0.6–2.3
Dinitroaniline herbicides		
<i>Dinitroanilines, group</i>		
Cantor 1992 [27]	46 cases/88 controls	1.2, 0.8–1.8
McDuffie 2001 [43]	11 cases/31 controls	1.2, 0.6–2.4
<i>Trifluralin</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 14 cases/23 controls	1.5, 0.8–3.1
Zahm 1993 [18] ¹	3 cases/24 controls	0.5, 0.1–1.7
McDuffie 2001 [43]	11 cases/31 controls	1.1, 0.5–2.2
De Roos 2003 [30]	52 cases/120 controls	0.9, 0.5–1.6
Mills 2005 [43,45]	NR	0.9, 0.4–1.8
Triazine herbicides		
<i>Triazine herbicides, group</i>		
Hoar 1986 [34]	14 cases/43 controls	2.5, 1.2–5.4
Cantor 1992 [27]	64 cases/133 controls	1.1, 0.8–1.6
Zahm 1993 [18] ¹	12 cases/38 controls	1.2, 0.6–2.6
Orsi 2009 [46]	17 cases /20 controls	1.9, 0.9–3.8
<i>Atrazine</i>		
Zahm 1993 [59]	130 cases/249 controls	1.4, 1.1–1.8
<i>Cyanazine</i>		
De Roos 2003 [30]	37 cases/96 controls	0.6, 0.3–1.0
<i>Metribuzin</i>		
De Roos 2003 [30]	20 cases/53 controls	0.8, 0.4–1.7
<i>Simazine</i>		
Mills 2005 [45]	NR	1.7, 0.9–3.0
Urea herbicides		
<i>Urea herbicides</i>		
Cantor 1992 [27]	5 cases/18 controls	0.6, 0.2–1.6
Orsi 2009 [46]	5 cases/7 controls	1.8, 0.5–6.0
<i>Linuron</i>		
De Roos 2003 [30]	5 cases/22 controls	0.3, 0.1–1.2

Table 4. Cont.

Author, date	N exposed	Risk ratio, 95% CI
Other herbicides		
<i>Bentazon</i>		
Cantor 1992 [27]	22 cases/58 controls	0.7, 0.3–1.5
<i>Nitrofen</i>		
Mills 2005 [45]	NR	1.2, 0.6–2.5
<i>Paraquat</i>		
De Roos 2003 [30]	2 cases/15 controls	0.1, 0.2–0.7
<i>Quaternary ammonium compounds, group</i>		
Orsi 2009 [46]	4 cases/12 controls	0.7, 0.2–2.3
<i>Sodium chlorate</i>		
De Roos 2003 [30]	8 cases/7 controls	4.1, 1.3–13.6
<i>Uracil herbicides</i>		
Hoar 1986 [34]	19 cases/114 controls	1.3, 0.7–2.5
FUNGICIDES		
Aldehyde fungicides		
<i>Aldehyde fungicides, group</i>		
McDuffie 2001 [43]	7 cases/25 controls	0.9, 0.4–2.3
<i>Formaldehyde</i>		
McDuffie 2001 [43]	7 cases/25 controls	0.9, 0.4–2.3
Amide fungicides		
<i>Amide fungicides, group</i>		
McDuffie 2001 [43]	30 cases/58 controls	1.7, 1.0–2.8
<i>Captan</i>		
McDuffie 2001 [43]	20 cases/24 controls	2.5, 1.3–4.8
Mills 2005 [45]	NR	0.9, 0.5–1.6
<i>Vitavax</i>		
McDuffie 2001 [43]	10 cases/39 controls	0.8, 0.4–1.9
Carbamate and dithiocarbamate fungicides		
<i>Carbamate fungicides</i>		
Orsi 2009 [46]	15 cases/17 controls	1.8, 0.9–3.7
<i>Maneb</i>		
Mills 2005 [45]	NR	1.1, 0.6–2.1
<i>Mancozeb</i>		
Mills 2005 [45]	NR	0.9, 0.5–1.9
Triazole fungicides		
<i>Triazole fungicides, group</i>		
Orsi 2009 [46]	8 cases/9 controls	1.9, 0.7–5.3
<i>Mecoprop</i>		
Pahwa 2012 [47]	51 cases/81 controls	2.3, 1.5–3.3
Mercury containing fungicides		
<i>Mercury fungicides, group</i>		
McDuffie 2001 [43]	18 cases/48 controls	1.3, 0.7–2.3
<i>Mercury dust</i>		
McDuffie 2001 [43]	15 cases/39 controls	1.2, 0.6–2.4

Table 4. Cont.

Author, date	N exposed	Risk ratio, 95% CI
<i>Mercury liquid</i>		
McDuffie 2001 [43]	8 cases/22 controls	1.4, 0.7–3.2
Fumigant fungicides		
<i>Methyl bromide</i>		
Mills 2005 [45]	NR	1.5, 0.8–2.7
<i>Dichloro-propane</i>		
Mills 2005 [45]	NR	0.9, 0.5–1.7
Other fungicides		
<i>Chlorothalonil</i>		
Mills 2005 [45]	NR	1.2, 0.6–2.2
<i>Sulfur compounds</i>		
McDuffie 2001 [43]	17 cases/21 controls	2.8, 1.4–5.6
INSECTICIDES		
Arsenicals		
<i>Acetoarcentate</i>		
De Roos 2003 [30]	41 cases/68 controls	1.4, 0.9–2.3
<i>Arsenic</i>		
Hardell 2002 [33]	8 cases/10 controls	1.8, 0.7–4.5
Eriksson 2008 [32]	7 cases/5 controls	1.6, 0.5–5.2
<i>Lead arsenate</i>		
De Roos 2003 [30]	9 cases/25 controls	0.5, 0.2–1.2
Botanical insecticides		
<i>Nicotine</i>		
Cantor 1992 [27]	31 cases/47 controls	1.5, 0.9–2.5
Cantor 1992 [27] ³	Handled prior to 1965: 28 cases/36 controls	1.8, 1.0–3.0
<i>Pyrethrine</i>		
De Roos 2003 [30]	6 cases/12 controls	1.0, 0.3–3.2
Eriksson 2008 [32]	15 cases/10 controls	1.7, 0.8–3.9
<i>Rotenone</i>		
Cantor 1992 [27]	12 cases/23 controls	0.5, 2.2–1.0
Carbamate insecticides		
<i>Carbamate insecticides, group</i>		
McDuffie 2001 [43]	37 cases/60 controls	1.9, 1.2–3.0
Zahm 1993 [18] ¹	7 cases/17 controls	1.6, 0.6–4.4
Zheng 2001 [60]	89 cases/172 controls	1.6, 1.0–2.4
<i>Bufencarb</i>		
De Roos 2003 [30]	6 cases/12 controls	1.1, 0.3–3.7
<i>Carbaryl</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 7 cases/4 controls	3.8, 1.1–13.6
De Roos 2003 [30]	30 cases/57 controls	1.0, 0.5–1.9
McDuffie 2001 [43]	25 cases/34 controls	2.1, 1.2–3.7
<i>Carbofuran</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 28 cases/63 controls	1.0, 0.6–1.7
McDuffie 2001 [43]	9 cases/18 controls	1.6, 0.7–3.9
Zheng 2001 [60]	66 cases/131 controls	1.6, 1.1–2.3

Table 4. Cont.

Author, date	N exposed	Risk ratio, 95% CI
<i>Methomyl</i>		
McDuffie 2001 [43]	37 cases/60 controls	2.1, 1.2–3.7
Fly spray		
Cantor 1992 [27]	185 cases/394 controls	1.1, 0.9–1.4
Cantor 1992 [27] ³	Handled prior to 1965: 173 cases/368 controls	1.1, 0.9–1.4
Organochlorine insecticides		
<i>Organochlorine insecticides, group</i>		
Cantor 1992 [27]	150 cases/162 controls	1.3, 1.0–1.7
Zahm 1993 [18] ¹	20 cases/46 controls	1.6, 0.8–3.1
Orsi 2009 [46]	15 cases/17 controls	1.8, 0.9–3.8
Purdue 2007 [51]	58 cases/44 non cases	0.8, 0.5–1.3
Pahwa 2012 [47]	106 cases/276 controls	1.3, 1.0–1.7
<i>Aldrin</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 34 cases/59 controls	1.3, 0.8–2.1
McDuffie 2001 [43]	10 cases/6 controls	4.2, 1.5–12.0
De Roos 2003 [30]	47 cases/97 controls	1.1, 0.7–1.7
Purdue 2007 [51]	21 cases/79 non-cases	0.6, 0.3–1.0
<i>Chlordane</i>		
Woods 1987 [57]	NR	1.6, 0.7–3.8
Cantor 1992 [27] ³	Handled prior to 1965: 22 cases/22 controls	2.2, 1.2–4.2
McDuffie 2001 [43]	36 cases/105 controls	1.1, 0.7–1.7
De Roos 2003 [30]	21 cases/26 controls	1.7, 0.9–3.2
Purdue 2007 [51]	27 cases/73 non-cases	0.7, 0.4–1.2
<i>DDT</i>		
Woods 1987 [57]	Not reported	1.8, 1.0–3.2
Cantor 1992 [27] ³	Handled prior to 1965: 68 cases/123 controls	1.3, 0.9–1.8
Persson 1993 [50]	4 case/3 controls	2.0, 0.2–18.9
Baris 1998 [20]	161 cases/340 controls	1.2, 1.0–1.6
Hardell 2002 [33]	77 cases/138controls	1.2, 0.9–1.7
De Roos 2003 [30]	98 cases/226 controls	1.0, 0.7–1.3
Purdue 2007 [51]	37 cases/63 noncases	0.9, 0.6–1.5
Eriksson 2008 [32]	50 cases/37 controls	1.5, 0.9–2.3
Pahwa 2012 [47]	33 cases/59 controls	1.7, 1.1–2.7
<i>Dieldrin</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 10 cases/13 controls	1.9, 0.8–4.4
De Roos 2003 [30]	21 cases/39 controls	1.8, 0.8–3.9
Purdue 2007 [51]	7 cases/92 controls	0.6, 0.2–1.3
<i>Heptachlor</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 14 cases/25 controls	1.3, 0.6–2.6
De Roos 2003 [30]	25 cases/43 controls	1.3, 0.7–2.2
Purdue 2007 [51] ²	18 cases/82 noncases	0.8, 0.4–1.4
<i>Lindane</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 14 cases/25 controls	2.2, 1.0–4.7
Blair 1998 [23]	93 cases/151 controls	1.5, 1.1–2.0

Table 4. Cont.

Author, date	N exposed	Risk ratio, 95% CI
McDuffie 2001 [43]	15 cases/23 controls	2.1, 1.0–4.2
Rafnsson 2006 [52]	37 cases/133 controls	3.5, 1.4–9.0
Purdue 2007 [51] ²	24 cases/76 controls	1.3, 0.8–2.1
<i>Methoxychlor</i>		
McDuffie 2001 [43]	65 cases/201 controls	1.0, 0.7–1.4
De Roos 2003 [30]	9 cases/16 controls	1.2, 0.5–2.7
<i>Toxaphene</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 6 cases/5 controls	2.4, 0.7–8.2
De Roos 2003 [30]	10 cases/13 controls	1.5, 0.6–3.5
Purdue 2007 [51] ²	24 cases/75 controls	1.5, 0.9–2.5
Organophosphorus insecticides		
<u>Organophosphorus insecticides</u>		
Zahm 1993 [18] ¹	14 cases/43 controls	1.2, 0.6–2.5
Waddell 2001 [56]	158 cases/279 controls	1.5, 1.2–1.9
Orsi 2009 [46]	20 cases/24 controls	1.7, 0.9–3.3
Pahwa 2012 [47]	92 cases/169 controls	1.9, 1.4–2.6
<i>Chlorpyrifos</i>		
Waddell 2001 [56]	7 cases/8 controls	3.2, 1.1–9.2
Lee 2004 [38] ²	37 participants	1.0, 0.6–1.7
<i>Coumaphos</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 3 cases/5 controls	1.5, 0.3–6.3
Waddell 2001 [56]	23 cases/37 controls	1.7, 1.0–2.9
<i>Crufomate</i>		
Waddell 2001 [56]	5 cases/8 controls	1.6, 0.5–4.9
<i>Diazinon</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 14 cases/12 controls	2.6, 1.2–5.9
McDuffie 2001 [43]	18 cases/28 controls	1.7, 0.9–3.2
Waddell 2001 [56]	60 cases/93 controls	1.7, 1.2–2.5
Mills 2005 [45]	NR	1.4, 0.8–2.5
<i>Dichlorvos</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 12 cases/17 controls	1.8, 0.8–3.9
Waddell 2001 [56]	23 cases/51 controls	1.0, 0.6–1.7
Koutros 2008 [37] ²	6 exposed cases	NR
<i>Dimethoate</i>		
McDuffie 2001 [43]	22 cases/50 controls	1.2, 0.7–2.1
Waddell 2001 [56]	12 cases/22 controls	1.8, 0.9–3.8
<i>Disulfoton</i>		
Waddell 2001 [56]	7 cases/13 controls	2.0, 0.8–5.3
<i>Ethoprop</i>		
Waddell 2001 [56]	7 cases/17 controls	0.9, 0.4–2.3
<i>Famphur</i>		
Waddell 2001 [56]	18 cases/47 controls	1.0, 0.5–1.8
<i>Fensulfothion</i>		
Waddell 2001 [56]	4 cases/4 controls	2.0, 0.5–8.2

Table 4. Cont.

Author, date	N exposed	Risk ratio, 95% CI
<i>Fonofos</i>		
Waddell 2001 [56]	43 cases/67 controls	1.7, 1.1–2.6
<i>Malathion</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 11 cases/9 controls	2.9, 1.1–7.4
Waddell 2001 [56]	91 cases/147 controls	1.6, 1.2–2.2
Mills 2005 [45]	NR	1.8, 1.0–3.2
Pahwa 2012 [47]	72 cases/127 controls	2.0, 1.4–2.7
<i>Methyl parathion</i>		
Mills 2005 [45]	NR	0.6, 0.3–1.2
<i>Parathion</i>		
Waddell 2001 [56]	5 cases/8 controls	2.9, 0.9–9.7
<i>Phorate</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 9 cases/12 controls	1.8, 0.7–4.5
Waddell 2001 [56]	44 cases/97 controls	1.1, 0.8–1.7
<i>Ronnel</i>		
Waddell 2001 [56]	6 cases/11 controls	1.3, 0.5–3.6
<i>Terbufos</i>		
Waddell 2001 [56]	32 cases/97 controls	1.1, 0.7–1.8
<i>Tetrachlorvinphos</i>		
Waddell 2001 [56]	9 cases/17 controls	1.8, 0.7–4.7
<i>Toxaphene</i>		
Mills 2005 [45]	NR	0.9, 0.5–1.9
<i>Trichlorfon</i>		
Cantor 1992 [27] ³	Handled prior to 1965: 6 cases/5 controls	2.4, 0.7–8.2
Waddell 2001 [56]	7 cases/11 controls	1.8, 0.7–4.7

Notes: 2,4-D, 2,4-Dichlorophenoxyacetic acid; 2,4,5-T, 2,4,5-Trichlorophenoxyacetic acid; EPTC, S-Ethyl dipropylthiocarbamate; MCPA, 2-methyl-4-chlorophenoxyacetic acid; DDT, dichlorodiphenyltrichloroethane; NHL, non-Hodgkin lymphoma; NR, Not reported; ¹ Only women included in analysis; ² Cohort study; ³ Effect estimate not included in the meta-analysis; another estimate from the same paper with a larger number of exposed cases was used..

3.4. Meta Analyses

When there was more than one effect estimate for a chemical group or active ingredient, the estimates shown in Tables 3 and 4 were combined to produce meta-analytic summary estimates and 95% CIs (Table 5).

The strongest meta RR estimates were associated with subtypes of NHL. There was a positive association between exposure to organophosphorus herbicide, glyphosate, and B cell lymphoma (2.0, 95% CI: 1.1–3.6, CLR: 3.2). Phenoxy herbicide exposures were associated with B cell lymphoma (1.8, 95% CI: 1.2–2.8, CLR: 2.4), lymphocytic lymphoma (1.8, 95% CI: 0.9–3.5, CLR: 3.8), and diffuse large B-cell lymphoma (DLBCL; 2.0, 95% CI: 1.1–3.7, CLR: 3.3). All these effect estimates were relatively precise, with CLR < 4.

Table 5. Meta analytic summary estimates of association between herbicides and insecticides with non-Hodgkin lymphoma.

Chemical group or active ingredient	Meta Risk Ratio estimate, 95% CI	I ²	Papers contributing
HERBICIDES			
<i>Amide herbicides</i>			
Amide herbicides	1.3, 0.8–1.9	22.2%	[18,27,34,46]
Alachlor	0.9, 0.6–1.3	43.0%	[30,39]
<i>Aromatic acid herbicides</i>			
Benzoic acid herbicides	1.3, 0.9–1.9	0.0%	[18,27,34,46]
Dicamba	1.4, 1.0–2.1	0.0%	[30,43]
<i>Carbamate/thiocarbamate herbicides</i>			
Carbamate/thiocarbamate herbicides	1.4, 1.1–2.0	0.0%	[18,43,60]
<i>Dinitroanilines</i>			
Dinitroanilines	1.2, 0.8–1.7	0.0%	[27,43]
Trifluralin	0.9, 0.6–1.3	0.0%	[18,30,43,45]
<i>Organophosphorus herbicides</i>			
Glyphosate	1.5, 1.1–2.0	32.7%	[30–33,43,46]
Glyphosate-association with B cell lymphoma	2.0, 1.1–3.6	0.0%	[32,63]
<i>Phenoxy herbicides</i>			
Phenoxy herbicides	1.4, 1.2–1.6	37.7%	[27,32–34,44,46–50,57,59]
Phenoxy herbicides, association with B cell lymphoma	1.8, 1.2–2.8	0.0%	[32,63]
Phenoxy herbicides, association with DLBCL	2.0, 1.1–3.7	0.0%	[32,63]
Phenoxy herbicides, association with lymphocytic lymphoma	1.8, 0.9–3.5	0.0%	[32,63]
2,4-D	1.4, 1.0–1.9	61.5%	[27,44,45,47,58]
MCPA	1.5, 0.9–2.5	54.4%	[30,32,33,44,47]
<i>Triazine herbicides</i>			
Triazine herbicides	1.5, 1.0, 2.1	38.5%	[18,27,34,46]
Urea herbicides			
Urea herbicides, group	1.0, 0.3–2.9	43.4%	[27,46]
INSECTICIDES			
<i>Arsenicals</i>			
Arsenic	1.7, 0.8–3.6	0.0%	[32,33]
<i>Botanical insecticides</i>			
Pyrethrine	1.4, 0.8–2.8	0.0%	[30,32]
<i>Carbamate insecticides</i>			
Carbamate insecticides, group	1.7, 1.3–2.3	0.0%	[18,43,60]
Carbaryl	1.7, 1.3–2.3	0.0%	[43,60]
Carbofuran	1.6, 1.2–2.3	0.0%	[43,60]
<i>Organophosphorus insecticides</i>			
Organophosphorus insecticides, group	1.6, 1.4–1.9	0.0%	[18,46,47,56]
Chlorpyrifos	1.6, 0.6–4.9	72.0%	[38,56]
Diazinon	1.6, 1.2–2.2	0.0%	[43,45,56]
Dimethoate	1.4, 0.9–2.1	0.0%	[43,56]
Malathion	1.8, 1.4–2.2	0.0%	[45,47,56]

Table 5. Cont.

Chemical group or active ingredient	Meta Risk Ratio estimate, 95% CI	I ²	Papers contributing
Organochlorine insecticides			
Organochlorine insecticides, group	1.3, 1.0–1.5	19.6%	[18,27,46,47,51]
DDT	1.3, 1.1–1.5	0.0%	[20,32,33,47,50,51,57]
DDT-association with B cell lymphoma	1.4, 1.0–2.0	0.0%	[20,32,63]
DDT-association with DLBCL	1.2, 0.9–1.7	0.0%	[20,32]
DDT-association with follicular lymphoma	1.5, 1.0–2.4	26.6%	[20,32]
Methoxychlor	1.0, 0.7–1.4	0.0%	[30,43]
Aldrin	1.0, 0.4–2.7	84.6%	[30,43,51]
Chlordane	1.1, 0.8–1.6	32.5%	[30,43,51,57]
Dieldrin	1.1, 0.4–3.1	67.6%	[30,51]
Heptachlor	0.9, 0.6–1.5	0.0%	[30,51]
Lindane	1.6, 1.2–2.2	26.0%	[23,43,51,52]
Toxaphene	1.4, 0.9–2.1	0.0%	[30,45,51]
Amide fungicides			
Captan	1.5, 0.5–4.2	82.5%	[43,45]

Notes: 2,4-D, 2,4-Dichlorophenoxyacetic acid; 2,4,5-T, 2,4,5-Trichlorophenoxyacetic acid; DDT, dichlorodiphenyltrichloroethane; EPTC, s-ethyl dipropylthiocarbamate; MCPA, 2-methyl-4-chlorophenoxyacetic acid; NHL, non-Hodgkin lymphoma; DLBCL, diffuse large B cell lymphoma; OC, Organochlorine; OP; Organophosphorus.

The meta RR estimates (95% CI) of association between phenoxy herbicide exposure and NHL subtypes were more positive than those for NHL overall, although the estimate of association with NHL overall was more precise (meta RR, 95% CI: 1.4, 1.2–1.6, CLR: 1.4). Only two papers contributed to each of the estimates of association between phenoxy herbicide exposures and NHL subtypes, and 12 papers contributed to the meta RR estimates for the relationship between phenoxy herbicide exposure and NHL overall.

There was a positive and relatively precise association between NHL and the phenoxy herbicide 2-methyl-4-chlorophenoxyacetic acid (MCPA) (meta RR, 95% CI: 1.5, 0.9–2.5, CLR: 2.6). Five estimates contributed to this summary estimate; an I² value of 54.4% indicates some inconsistency in the effect estimates. The forest plot for the meta-analysis of MCPA, along with plots for meta-analyses of phenoxy herbicides as a group, the phenoxy herbicide 2,4-D, glyphosate, organochlorine insecticides as a group, and the organochlorine insecticide DDT, are presented in Supplementary Figure S1.

In addition to assessing the association of ever exposure to MCPA with NHL, Hardell *et al.* [33] investigated dose-response relationships between number of days of exposure; they observed increasing odds in association with increased number of days of MCPA exposure (Table 2). In similar analyses, Eriksson *et al.* [32] and McDuffie *et al.* [43] did not observe dose-response relationship between days/year of MCPA exposure and NHL.

There was a positive but less precise estimate of association between arsenic and NHL (meta RR, 95% CI: 1.7, 0.8–3.6, CLR: 4.4). Meta estimates of association between NHL and carbamate insecticides and carbaryl, a carbamate insecticide, were nearly identical (meta RR, 95% CI: 1.7, 1.3–2.3,

CLR: 1.8) and both were positive and precise. Estimates from three papers contributed to the meta analysis of carbamate insecticides. The I^2 value was 0%, indicating consistency in effect estimates. Carbofuran, another carbamate insecticide, was positively associated with NHL (meta RR, 95% CI: 1.6, 1.2–2.3, CLR: 2.0). However, in two investigations from the Agricultural Health Study that reported estimates of association with tertiles of lifetime days of exposure to carbofuran [25] and carbaryl [42], the relationships were imprecise and there was a lack of a dose-response relationship (Table 2).

There were positive and precise estimates of association between NHL and organophosphorus insecticides (meta RR, 95% CI: 1.6, 1.4–1.9, CLR: 1.4), and the organophosphorus insecticides diazinon (meta RR, 95% CI: 1.6, 1.2–2.2, CLR: 1.8), and malathion (meta RR, 95% CI: 1.8, 1.4–2.2, CLR: 1.5). Although Fritschi *et al.* [62] studied the relationship between organophosphorus insecticides and NHL, we did not include the estimate from their paper in the meta analysis because they investigated the association with exposure in three categories (no exposure, non-substantial exposure, substantial exposure). Fritschi *et al.* [62] reported a positive but imprecise estimate for substantial exposure *versus* no exposure (odds ratio, 95% CI: 2.1, 0.8–5.7, CLR: 7.3). The meta RR estimate of association between NHL and the organophosphorus insecticide chlorpyrifos was positive but imprecise (meta RR, 95% CI: 1.6, 0.6–4.9, CLR: 8.9). There was a positive and precise association with lindane, an organochlorine insecticide (meta RR, 95% CI: 1.6, 1.2–2.2, CLR: 1.8); estimates of association with other organochlorine insecticides were closer to the null.

3.5. Sensitivity Analyses

We conducted sensitivity analyses to examine the effect of gender (Supplementary Table S1), study design (Supplementary Table S2), diagnosis period (Supplementary Table S3), geographic region (Supplementary Table S4), source for controls in case-control studies (Supplementary Table S5) and/or the effect of using alternative papers that represent the same study population (Supplementary Table S6). For the most part, meta-estimates were robust.

3.5.1. Gender

When we subset the analyses of associations between NHL and amide herbicides to the two studies that included men only, the association became more positive but less precise (meta RR, 95% CI: moved from 1.3, 0.8–1.9, CLR: 2.3 to 1.7, 0.7–3.8, CLR: 5.3). Restricting to all male studies moved the summary estimate of the relationship with aldrin up and across the null; however, the estimate in the sensitivity analysis was too unstable to interpret (meta RR, 95% CI: moved from 1.0, 0.4–2.7, CLR: 7.8 to 1.4, 0.2–11.1, CLR: 65.0). Restricting the analysis to studies that included men and women caused the meta RR estimate of association between NHL and 2,4-D to become more positive but less precise; it moved from 1.4, 1.0–1.9, CLR: 1.9 to 1.8, 0.5–7.5, CLR: 16.7. We were not able to conduct sensitivity analyses for female only studies, since only one paper reported results for women only [18].

3.5.2. Study Design

Nearly all of the studies that contribute to the meta estimates were case control in design. The only cohort study was the Agricultural Health Study. In nearly all of the analyses of data from the

Agricultural Health Study, exposure was defined using multiple categories. However, in the papers on glyphosate [31], chlorpyrifos [38], organochlorine insecticides, aldrin, chlordane, dieldrin, lindane, and toxaphene [51], the association with ever/never use of exposure was analyzed. For the most part, restricting analyses to case control studies did not cause the meta estimate to change substantially (Supplementary Table S2). However, the magnitude of the meta RR for aldrin moved up and away from the null, but became more imprecise (it moved from 1.0, 0.4–2.7, CLR: 6.8 to 1.4, 0.2–11.1, CLR: 55.5). For lindane it changed from 1.6, 1.2–2.2, CLR: 1.8 to 1.9, 1.2–2.9, CLR: 2.4.

3.5.3. Diagnosis Period

We also investigated the sensitivity of the meta-analytic estimates to decade of cancer diagnosis (Supplementary Table S3). For the most part, estimates were robust. However, when we subset the meta-analysis of glyphosate to the two papers in which cases were diagnosed from 1975–1989, the meta RR, 95% CI changed from 1.5, 1.1–2.0, CLR: 1.8 to 2.3, 1.4–4.0, CLR: 3.0. Similarly, for the phenoxy herbicide 2,4-D, when we included estimates from the three papers with diagnosis periods from 1975 to 1989, the summary estimate was more positive but less precise (meta RR, 95% CI: 1.8, 1.0–3.1, CLR: 3.2) compared to the full meta-analysis estimate (1.4, 95% CI: 1.0–1.9; CLR: 1.9).

3.5.4. Geographic Area

We investigated the impact of geographic area on the meta-analytic RR estimates (Supplementary Table S4). For glyphosate exposure, including estimates from papers that reported results from Swedish studies caused the estimate to become more positive; it moved from 1.5, 95% CI: 1.1–2.0, CLR: 1.8 to 2.2, 95% CI: 1.3–3.8, CLR: 2.9. Similarly, restricting estimates of the relationship between NHL and phenoxy herbicide exposure to Sweden caused the estimate to become more positive; it changed from 1.4, 95% CI: 1.2–1.6, CLR: 1.4 to 1.9, 1.4–2.4, CLR: 1.7. When we restricted estimates of association with MCPA to those that came from North American studies, the meta RR moved towards the null, from 1.5, 0.9–2.5, CLR: 2.6 to 1.1, 0.7–1.8, CLR: 2.7. In contrast, restricting to European and Swedish studies caused the estimate of association with MCPA to become more positive (meta RR, 95% CI: 1.9, 0.9–3.8, CLR: 4.1 and 2.7, 1.6–4.4, CLR: 2.7 respectively). When we included estimates of association with aldrin that came from studies conducted in the USA, the estimate became more precise but moved down and away from the null (meta RR, 95% CI: 1.0, 95% CI: 0.4–2.7, CLR: 7.8 changed to 0.5, 95% CI: 0.4–0.8, CLR: 2.3).

3.5.5. Source of Controls in Case Control Studies

Only two papers reported results from case control studies in which controls were selected from the hospital [46,48]. The meta-analytic RR estimates remained robust when we restricted the estimates to those resulting from population-based case-control studies (Supplementary Table S5).

3.5.6. Alternative Papers

In several cases, analyses of the same study populations were represented in multiple papers. For the meta-analyses, we included the result(s) that represented the largest number of participants.

In some cases, we selected the result from a pooled analysis instead of the individual, original studies. In other cases, use of effect estimates from the individual studies was preferable because it represented more people. We performed sensitivity analyses to evaluate the impact of replacing results from pooled analyses of multiple studies [23,30,59,60] with the original ones [27,34,58], or the original ones with the pooled analyses (Supplementary Table S6).

When we replaced the estimate of a relationship between carbofuran exposure and NHL reported in Zheng *et al.* [60] by that reported in Cantor *et al.* [27] the relationship became weaker and less precise; the meta RR and 95% CI changed from 1.6, 1.2–2.3, CLR: 2.0 to 1.1, 0.7–1.8, CLR: 2.4. Using the estimate reported in De Roos *et al.* [30] yielded a similar result (meta RR, 95% CI changed to 1.1, 0.6–2.0, CLR: 3.1). For the relationship between aldrin and NHL, we replaced the estimate reported in De Roos *et al.* [30] by that reported by Cantor *et al.* [27]; the estimate moved from a null relationship to a positive one (meta RR, 95% CI changed from 1.0, 0.4–2.7 to 1.3, 0.5–2.9).

4. Discussion

This systematic review and series of meta-analyses show that there is consistent evidence of positive associations between NHL and carbamate insecticides, organophosphorus insecticides, lindane, an organochlorine insecticide, and MCPA, a phenoxy herbicide. Our results represent an important contribution to a growing body of literature on agricultural exposures associated with cancer. Past review papers and meta-analyses have identified positive associations between NHL and farming related exposures, including fertilizers, chemicals, and animals [5], and occupational exposures to pesticides [6].

We extracted estimates of association of NHL with individual pesticide chemical groups or active ingredients from 44 papers that reported analyses of results from 17 independent studies. The studies represented data collected in 12 countries, the majority of which were located in either Europe or North America. Several of the papers that we identified were related to one another; many used data from the same cohort study, the Agricultural Health Study, and several others pooled the same data from individual studies. Thus, although this review identified 44 papers, it also highlights the need for additional epidemiologic studies in a larger variety of geographic locations.

In the papers from which we extracted information, estimates of associations with NHL were reported with 13 herbicide chemical groups and 28 herbicide active ingredients, five fungicide groups and 12 fungicide active ingredients, and three insecticide groups and 40 insecticide active ingredients. More than 1,700 active ingredients are listed in Alan Wood's compendium of pesticide common names, although not all of these are necessarily used in agriculture or currently registered for use in any or all countries [13]. Many chemicals remain for consideration in future epidemiologic analyses of associations between NHL and pesticides. It would be useful to identify pesticides to investigate by ranking, by country, the most commonly used chemicals.

The positive and precise estimate of associations of NHL with carbamate insecticides, organophosphorus insecticides, and lindane were robust to sensitivity analyses of gender, geographic area, and cancer diagnosis period. The positive association between MCPA and NHL was robust to a sensitivity analysis of diagnosis period, but when we restricted the meta-analysis to estimates from studies conducted in North America, the estimate moved to the null.

Consistent with the results from the meta-analysis of lindane exposure, analyses of data from the American cohort, the Agricultural Health Study, revealed a positive dose-response relationship between NHL and intensity weighted lifetime days of lindane exposure, where the referent group consisted of applicators never exposed to pesticide products containing the active ingredient [51]. In this same paper, however, the estimate of association with dichotomously coded exposure to lindane was close to the null and imprecise. This difference in results within the Agricultural Health Study suggests that dichotomous classification of exposure might be too crude; the binary categories could lead to exposure misclassification and attenuated effect estimates. Because of variability in definitions and cut-points across papers, we were unable to conduct formal meta-analyses of exposures classified using multiple categories. When they were available, we reviewed estimates of dose-response relationships from the individual papers. We found that, in most of the papers in which dose-response relationships were investigated, effect estimates were imprecise due to small numbers of exposed cases within categories.

There were positive meta RR estimates of association of NHL with two carbamate insecticides, carbaryl and carbofuran, and the organophosphorus insecticide active ingredients diazinon and malathion. However, results from analyses of Agricultural Health Study data, which were not included in the meta-analyses, did not show dose response relationships between NHL and lifetime days of exposure to carbofuran [25], carbaryl [42], diazinon [29] or malathion [21,26].

Some discrepancies in findings from the Agricultural Health Study compared to the other studies could be due to differences in design (cohort *versus* case-control). Differences could also be the result of different referent category compositions. All participants of the Agricultural Health Study were pesticide applicators; therefore, the referent group generally consisted of applicators who were not exposed to the pesticide active ingredient of interest. In contrast, in the papers contributing to the meta-RR estimate for carbaryl [30,43] and carbofuran [43,60], the referent groups consisted of farmers and non-farmers [30,43], or only of non-farmers [60]. In the papers contributing to the meta-analyses of malathion and diazinon, the referent categories consisted of non-farmers [56], farmers and non-farmers [43,47], and only farm-workers [45]. It is possible that, in studies that included non-farmers in the referent group, confounding by other agricultural exposures, not adjusted for in analysis, caused estimates of association to be higher than results from Agricultural Health Study analyses.

Only a handful of papers reported associations of pesticides with NHL subtypes; this is probably due to small sample sizes. Our meta-analyses of these relationships suggested the need for further studies of this kind, especially since some of the strongest relationships were seen with the most common subtype of NHL, B cell lymphoma and, more specifically, with DLBCL. NHL are a heterogeneous group of malignancies that include multiple subtypes with varied characteristics and possibly diverse etiologies [4]. Consequently, the overall group of neoplasms represented by NHL might be too diverse as a study endpoint to adequately detect associations with pesticide exposures in epidemiologic analyses. Some but not all specific subtypes of lymphoma might be associated with pesticides, and these relationships would only be revealed by analyses of the subtypes. Pooling projects that include cases of the NHL subtypes that have been classified according to the more recent and etiologically specific definitions (B-cell, T-cell, and within these, more refined subtypes of T- and B-cell neoplasms) [65] present the opportunity to perform more sensitive

epidemiologic analyses and identify important relationships that may have been undetected if the cancer outcome was defined broadly as NHL overall. Such projects are particularly attractive for studying rarer subtypes (*i.e.*, T-cell). To this end, a pooling project within the AGRICOH consortium [64] is currently underway to investigate these associations.

There are various sources of heterogeneity across the studies that contributed to these meta-analyses; these include gender, region, cancer diagnosis period, exposure assessment methods, exposure definitions, referent groups, study populations, and/or analysis adjustment sets. Different activity patterns, which might cause differences in exposure, combined with different biological mechanisms, could result in between-gender differences in chemical exposure and disease risk associations. Pesticide use, application, and handling patterns, regulations and legislation, demographics and genetics differ by region, which could contribute to area-specific differences in associations. In the papers that contributed to the meta analyses, a variety of exposure assessment methods were used; these included self-reported chemical exposures, exposure matrices, and approximations based on number of animals raised. Differences in exposure assessment methods could influence the magnitude of effects observed, especially since some methods might be superior to others in terms of reducing the potential for exposure misclassification. Study design (case-control *versus* cohort) and source of controls in case-control studies (hospital *versus* population) could also influence the magnitude of the exposure estimates observed. In case-control studies, exposure is assessed retrospectively, which could lead to recall bias. In contrast, in the Agricultural Health Study, the only cohort included in this review, exposure was assessed when participants were cancer-free. Finally, NHL classification systems have changed over time, reflecting changes in disease definitions [1]. Recently (after year 2000), the definition of NHL has become more comprehensive. The definition now includes disease entities that were excluded from earlier definitions, such as plasma cell neoplasms (*i.e.*, multiple myeloma) and chronic lymphocytic leukemia. These malignancies are also among the most frequently reported sub-types within NHL [65]. Thus, estimates of association between pesticides and overall NHL from studies conducted in earlier periods may not be entirely comparable to estimates from research conducted since the year 2000 that used the updated NHL definition.

We did not conduct a formal test of publication bias; it is unclear if asymmetry tests with funnel plots are useful in meta-analyses of observational studies, and it has been recommended that these tests not be used when fewer than 10 studies contribute to a meta-analysis [66]. For the most part, we believe that our review was systematic and comprehensive.

Nevertheless, we did not identify papers that published results of studies conducted in middle- and low-income countries. It is possible that, in such regions where cancer follow and exposure ascertainment may be particularly challenging, no studies have investigated the relationship of NHL with pesticide exposures. Restricting our literature search to articles published in English could be another reason that we did not identify studies in lower-income countries. A lack of studies in these areas is potentially alarming, since these regions are responsible for much of the world's agricultural production [67]. Also, lympho-hematopoietic malignancies represent a substantial proportion of cancers in low- and middle-income countries. For example, based on estimates from the World Health Organization's GLOBOCAN 2012, NHL accounted for 37.7% of the estimated prevalent cancer cases diagnosed in the past 5 years, among adults in less-developed regions (Africa, Asia excluding Japan, Latin America and the Caribbean, Melanesia, Micronesia, and Polynesia) [68]. Nevertheless, research results

from higher-income countries could be transferable and have important implications for pesticide regulation and legislation world-wide, especially in low-income countries where protective equipment may be less available and/or used.

There are several mechanisms by which pesticide exposure might be associated with NHL. First, pesticides might cause chromosomal aberrations and genetic mutations. An often studied chromosomal abnormality is the t(14;18) translocation, which is particularly common among cases of follicular lymphoma and diffuse large B-cell lymphoma [69]. In a paper that used data from the Iowa/Minnesota case-control study that contributed to several of the pooled and individual analyses that we reviewed [23,30,59], Schroeder *et al.* [70] investigated the relationship between pesticide exposures and the t(14;18) translocation. Compared with controls, t(14;18) positive NHL cases but not t(14;18) negative cases had a higher odds of exposure to dieldrin, toxaphene, lindane, and atrazine. Chiu *et al.* [69,71] performed a similar analysis using data from the Nebraska-based case-control study and reported positive associations between t(14;18) positive NHL and dieldrin, toxapehen, and lindane. A second mechanism by which pesticide exposure may cause NHL is by altering cell mediated immune function. Indeed, immunological changes have been observed following short-term exposure to phenoxy herbicides (2,4-D and MCPA) among farmers [72].

The IARC Monographs have evaluated the carcinogenicity of a handful of pesticides. Of these, only arsenic and inorganic arsenic compounds have been given a Group 1 rating (carcinogenic to humans) [73]. The fumigant insecticide ethylene dibromide was classified as a group 2A carcinogen based on inadequate evidence for carcinogenicity in humans but sufficient evidence in experimental animals; the overall evaluation was upgraded to 2A (probably carcinogenic to humans) with supporting evidence from other relevant data [74]. In Volume 53 (1991) [75], the fungicide captafol was also classified as a group 2A carcinogen based on sufficient evidence in experimental animals but no available data from human studies. In this same volume, several other pesticides were classified as either group 2B (possibly carcinogenic to humans) or group 3 carcinogens (not classifiable as to its carcinogenicity)—aldicarb chlordane/heptachlor, DDT, deltamethrin, dichlorvos, fenvalerate, permethrin, thiram, ziram, atrazine, monuron, picloram, simazine, and trifluralin. The IARC monographs have classified other pesticides, including heptachlor, chlordane, and toxaphene [76], as group 2B carcinogens; in each of these cases, the 2B classification was based on inadequate evidence in humans but sufficient evidence in experimental animals. Chlorophenoxy herbicides were classified as group 2B carcinogens based on limited evidence for carcinogenicity in humans, and inadequate evidence for carcinogenicity of 2,4-D and 2,4,5-T in animals [77]. Similarly, hexachlorocyclohexanes were evaluated as group 2B carcinogens due to inadequate evidence for carcinogenicity to humans, sufficient evidence for carcinogenicity to animals for the technical-grade and the alpha isomers but limited for the beta and gamma (lindane) isomers [77]. Several other pesticides, including malathion and maneb [77] have been classified as group 3 carcinogens. These evaluations took place several decades ago and there is now more epidemiologic literature that can provide information. There also remains a need for further epidemiologic research of certain chemicals, which could help to inform future evaluations. In the current systematic review, we did not observe entirely consistent trends in association for all of the active ingredients within chemical groups. Furthermore, classification of active ingredients into groups is subjective and there is not a consistent and established scheme for doing so. Therefore, evaluations of individual active ingredients rather than chemical groups might be more useful.

Limitations and Strengths

Because of variability in definitions and metrics that were used in published papers, we were not able to consider additional exposure definitions, such as exposure lags, duration of exposure (e.g., number of days/year exposed), or routes of exposure (e.g., application *versus* mixing of pesticides). In an effort to use similar exposure definitions from the various papers, we only included dichotomous definitions in the meta-analyses. Since dose-response relationships could not be summarized, this restricted the strength of our conclusions from an etiologic perspective. Furthermore, we were not able to conduct analyses of certain active ingredients or chemical groups due to a lack of published literature. In other cases, very few papers contributed to the meta-analyses. The largest number of papers contributing to any meta-analysis was 12 for phenoxy herbicides, followed by eight for DDT. Most meta-analyses included estimates from only two to three studies. In most papers, associations with NHL overall, rather than with subtypes of NHL, were investigated. Thus, most of our meta-analyses were of associations with NHL rather than with its subtypes, which are probably more homogeneous disease entities for assessing the relationship with pesticides. It is possible that this led to a dilution of effects, since the various NHL subtypes have diverse etiologies and some might be more strongly associated with certain pesticides than others.

Nevertheless, this systematic review represents a novel contribution to the literature on NHL and pesticide exposure. We identified trends in the relationship of NHL and NHL subtypes with chemical groups and active ingredient groups. To our knowledge, this is the most comprehensive systematic review and meta-analysis to investigate associations with specific agricultural pesticide active ingredients. We observed fairly consistent results for certain pesticide groups and active ingredients. We evaluated the robustness of our meta-analyses by examining the sensitivity of the estimates to gender, study design, region, diagnosis period, control source in case-control studies, and paper that provided the effect estimate.

5. Conclusions

We systematically reviewed more than 25 years' worth of epidemiologic literature on the relationship between pesticide chemical groups and active ingredients with NHL. This review indicated positive associations between NHL and carbamate insecticides, OP insecticides, the phenoxy herbicide MCPA, and lindane. Few papers reported associations with subtypes of NHL; however, based on the few that did, there were strong associations between certain chemicals and B cell lymphomas. Our results show that there is consistent evidence that pesticide exposures experienced in occupational agricultural settings may be important determinants of NHL. This review also revealed clear research needs, including further investigation of some already studied pesticide active ingredients, of additional pesticides that have not yet been investigated in epidemiologic analyses, of the strength of association of pesticide exposures with subtypes of NHL, and of the relationship between NHL and pesticides in middle- and low- income areas.

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Author Contributions

Leah Schinasi conducted the literature search, screened the papers from the search, abstracted data from the papers, conducted the meta-analyses, and led the writing of the manuscript. Maria E. Leon co-defined the scope of the review, the search strategy for the literature search and contributed to the writing of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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Unified United States Common Law Grand Jury:

P.O. Box 59; Valhalla, New York, 10595; Fax - (888) 891-8977

WRIT OF QUO WARRANTO

5 SERVED VIA UNITED STATES POSTAL SERVICE TO: United States Supreme Court
Judges and all Federal District Judges:

10 FILED VIA UNITED STATES POSTAL SERVICE IN: US Supreme Court & All United
States District Courts

*"Silence can only be equated with fraud where there is a legal or moral duty to speak,
or where an inquiry left unanswered would be intentionally misleading..."¹*

15

- Official proceeding 18 USC §1512 • Clerk is to file. 18 USC §2076 • Felony to conceal or remove 18 USC §2071

20 Bar controlled federal and state court judges, by their presumed authority, contrary to their oath
and duty fraudulently claim the Constitution for the United States and its cap-stone Bill of Rights
abolished by traitorous bar controlled legislators, acts of conspiracy, treason and war against the
United States.

25 We the People Decree by Quo Warranto all said unconstitutional legislation null and void and
declare all such subversives enemies of the Peoples of the United States of America and order all
United States Marshals, Bailiffs, County Sheriffs and Deputies to arrest all such federal and state
judges for conspiracy, treason and breach of the peace when witnessing the violation of Peoples'
unalienable rights from the bench, in violation of Article III Section 3 for levying war against the
people, adhering to the enemy, giving aid and comfort.²

30 18 U.S. Code §2385 WHOEVER ORGANIZES OR HELPS OR ATTEMPTS TO ORGANIZE ANY SOCIETY, GROUP,
OR ASSEMBLY OF PERSONS WHO TEACH, ADVOCATE, OR ENCOURAGE THE OVERTHROW OR DESTRUCTION
OF ANY SUCH GOVERNMENT³ BY FORCE OR VIOLENCE; OR BECOMES OR IS A MEMBER OF, OR AFFILIATES
WITH, ANY SUCH SOCIETY, GROUP, OR ASSEMBLY OF PERSONS [BAR], KNOWING THE PURPOSES THEREOF -
SHALL BE FINED UNDER THIS TITLE OR IMPRISONED NOT MORE THAN TWENTY YEARS, OR BOTH...

¹ U.S. v. Tweel, 550 F.2d 297, 299. See also U.S. v. Prudden, 424 F.2d 1021, 1032; Carmine v. Bowen, 64 A. 932

² Article III Section 3. Treason against the United States, shall consist only in levying war against them, or in adhering to their enemies, giving them aid and comfort.

³ Preamble We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America. Article I Section 8 To make rules for the government and regulation of the land and naval forces;

WRIT QUO WARRANTO⁴

"It will be an evil day for American Liberty if the theory of a government outside supreme law finds lodgment in our constitutional jurisprudence. No higher duty rests upon this Court than to exert its full authority to prevent all violations of the principles of the Constitution."

5 [Downs v. Bidwell, 182 U.S. 244 (1901)]

COMES NOW THE CONSTITUTED⁵ UNIFIED⁶ COMMON LAW⁷ GRAND JURIES⁸ of the fifty united States of America, this evil day;

10 WE COMMAND all County, State, Federal and US Supreme Court judges and clerks to perform their duty guaranteeing to every state in this union a republican form of government⁹ and protect each of them against invasion¹⁰, or vacate your office now.

15 WHEREAS; We the People in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, did ordain and establish the Constitution for the United States of America that all Judges and all members of the Government both state and Federal are lawfully bound to obey¹¹, DECREE THAT:

20 We the People have been providentially provided legal recourse to address the criminal conduct of persons, themselves entrusted to dispense justice. The grand jury is an institution separate from the courts, over whose functioning the courts do not preside thus, the People have the unbridled right by law and in law to empanel their own grand juries and present "True Bills" of information, indictment and presentment

⁴ **QUO WARRANTO**. In old English practice. A writ, in the nature of a writ of right for the king, against him who claimed or usurped any office, franchise, or liberty, to inquire by what authority he supported his claim, in order to determine the right. It lay also in case of non-user, or long neglect of a franchise, or misuser or abuse of it; being a writ commanding the defendant to show by what warrant he exercises such a franchise, having never had any grant of it, or having forfeited it by neglect or abuse. 3 Bl.Comm. 262.

⁵ **CONSTITUTED** - The People of each county have come together to agreed and declared a return to Common Law Juries.

⁶ **UNIFIED** - Every county in the state has constituted the Common Law Juries.

⁷ **COMMON LAW** - Article VI - This Constitution, and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.

⁸ **COMMON LAW GRAND JURY** - Amendment V No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury...; The Court of Appeals' rule would neither preserve nor enhance the traditional functioning of the grand jury that the "common law" of the Fifth Amendment demands. UNITED STATES v. WILLIAMS, Jr. 112 S.Ct. 1735; 504 U.S. 36; 118 L.Ed.2d 352

⁹ **Article IV Section 4**. The United States shall guarantee to every state in this union a republican form of government, and shall protect each of them against invasion; and on application of the legislature, or of the executive (when the legislature cannot be convened) against domestic violence.

¹⁰ **INVASION**. (Blacks 4th) An encroachment upon the rights of another; the incursion of an army for conquest or plunder. Webster. See /Etna Ins. Co. v. Boon, 95 U.S. 129, 24 L.Ed. 395. CONSTITUTIONAL LIBERTY OR FREEDOM. Such freedom as is enjoyed by the citizens of a country or state under the protection of its constitution; the aggregate of those personal, civil, and political rights of the individual which are guaranteed by the constitution and secured against invasion by the government or any of its agencies. People v. Hurlbut, 24 Mich. 106, 9 Am.Rep. 103.

¹¹ **Article VI**. This Constitution, and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.

to a court of record, which is then required to commence a criminal proceeding. Our Founding Fathers with foresight grafted into the common law Fifth Amendment a "buffer" the People may rely upon for justice, when public officials, including judges go rogue, act in bad behavior and criminally violate the law.¹²

5

THE PRIME DIRECTIVE

The prime directive¹³ ordained by the American People purposed their government to (1) form a more perfect union,¹⁴ (2) establish justice, (3) insure domestic tranquility, (4) provide for the common defense, (5) promote the general welfare, and (6) secure the blessings of liberty to ourselves and our posterity.

10 The subsequent violent felony acts of war by our servants against the aforesaid prime directive (1) debilitates the union of the American People, (2) establishes injustice, (3) undermines domestic tranquility, (4) renders the People vulnerable to foreign and domestic enemies, (5) destabilizes the general welfare, and (6) annihilates the blessings of liberty to ourselves and our posterity.¹⁵

15 Common-sense can only conclude that there are forces within our servant government conspiring war and subterfuge against the American People by denying the very republican form of government¹⁶ that they took an oath¹⁷ to protect and defend against all enemies foreign and domestic. Thereby it is the duty of all oath-takers to take a stand now, obey and defend the Constitution, and assist the People in arresting and terminating the following unconstitutional acts, by simply obeying the law of the land and acknowledging the unalienable right of the People to self-govern. Therefore judges everywhere are commanded "AGAIN" to obey the law of the land and sign the attached mandamus. The excuse "we are only following orders" did not stand in Nuremberg and it most certainly "will not stand here." To prove our conclusion, let facts be submitted to a candid world:

- ❖ Our servants have refused Assent to Laws, the most wholesome and necessary for the public good;
- ❖ Our servants have trodden upon the rights of the People;
- ❖ Our servants have passed legislation destructive to the Constitution, forbidden by the same;
- 25 ❖ Our servants have exposed We the People to all the dangers of invasion from without, and subversion from within;
- ❖ Our servants have obstructed the laws for illegal-alien who are flooding our nation with foreign insurgents some hostile destroying our economy and putting at risk the security of our States;

¹² **UNITED STATES v. WILLIAMS**, 112 S.Ct. 1735, 504 U.S. 36, 118 L.Ed.2d 352; No. 90-1972. Argued Jan. 22, 1992. Decided May 4, 1992.

¹³ **Preamble to the Constitution for the United States of America** - We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America.

¹⁴ A perfect union of states but a "more perfect union" among the People, anti-federalist papers, Bruno.

¹⁵ **Declaration of Independence** - We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.--That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, --That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness.

¹⁶ **Article IV Section 4**. The United States shall guarantee to every state in this union a republican form of government, and shall protect each of them against invasion;

¹⁷ **Article VI** The Senators and Representatives before mentioned, and the members of the several state legislatures, and all executive and judicial officers, both of the United States and of the several states, shall be bound by oath or affirmation, to support this Constitution;

- ❖ Our servants have obstructed the Administration of Justice, by refusing acquiescence to laws established for Judiciary powers;
- ❖ Our servants have transformed judges into chancellors dependent upon the will of the BAR Guild alone, a society of mercenary economic corporate hit men-Esquires¹⁸, resolute on destroying common law, the foundation of America;
- ❖ Our servants have erected a multitude of 4th Branch administrative agencies unaccountable to the Constitution, and sent hither swarms of corporate administrative, disobedient to the Constitution, revenue and code enforcement officers to harass our people, and eat out their substance;
- ❖ Our servants have kept among us, in times of peace, Standing Armies and excessively militarized local police forces without the Consent of the People;
- ❖ Our servants have joined with foreign bankers to subject us to a jurisdiction foreign to our Constitution, and unacknowledged by our laws; giving assent to their acts of pretended legislation;
- ❖ Our servants are secretly accommodating large bodies of armed foreign troops among us;
- ❖ Our servants have imposed a multiple of property-robbing taxes, direct taxes, fees and fines on us without our Consent;
- ❖ Our servants have deprived us of the benefits of honest Trial by Jury;
- ❖ Our servants have deprived us of the benefits of unrigged Grand Juries;
- ❖ Our servants have transported us into chancery courts to be tried for pretended offences;
- ❖ Our servants have enlarged its boundaries under the guise of District of Columbia (10 mile square federal city) so as to render it at once an example and fit instrument for introducing absolute rule into these States;
- ❖ Our servants have arrogantly disregarded our Bill of Rights, abolishing our most valuable laws, altering fundamentally the Peoples form of government, without consent;
- ❖ Our servants have declared power to legislate through executive order, without consent;
- ❖ Our servants have waged War against us;
- ❖ Our servants have plundered our manufacturing base, ravaged our small businesses and destroyed the lives of our people;
- ❖ Our servants have excited domestic insurrections amongst us;
- ❖ Our servants have engaged in human trafficking of our children and elderly through courts;
- ❖ Our servants have engaged in Racketeering and extortion through our courts;
- ❖ Our servants have held mock trials in courts not of record and thereby unlawfully incarcerating and financially fleecing millions of People, denying due process;
- ❖ Our servants have empanelled bogus puppet grand and petit juries in order to perform BAR will and profiteering;
- ❖ Our servants have stolen our homes in rem and fraud assisting bankers in double-dipping;
- ❖ Our servants have kidnaped our children and destroyed our families in family courts;
- ❖ Our servants have robbed our parents, turned their twilight years into nightmares and destroyed our families in probate court;
- ❖ Our servants have turned our common law courts into chancery courts of injustice;
- ❖ Our servants have put People in debtors prison;

¹⁸ **ESQUIRE.** In English law. A title of dignity next above gentleman, and below knight. Also a title of office given to sheriffs, serjeants, and barristers at law, justices of the peace, and others. 1 Bl.Comm. 406; 3 Steph.Comm. 15, note; Tomlins. On the use of this term in American law, particularly as applied to justices of the peace and other inferior judicial officers, see *Christian v. Ashley County*, 24 Ark. 151; *Corn. v. Vance*, 15 Serg. & R., Pa., 37.

❖ Our servants have transformed our unalienable rights into crimes violating at every stage our Bill of Prohibitions, serving the BAR and not the People:

- Against Amendment I our servants have prohibited the free exercise of Judeo-Christian religion, our servants have denied free speech, our servants have commandeered the press, our servants have denied our right to petition the government for a redress of grievances;
- Against Amendment II our servants have dismantled the Militia and closed our armories, our servants have denied the right of the people to keep and bear arms;
- Against Amendment IV our servants have violated our privacy using bogus warrants, spying on the people, eavesdropping on our conversations and unlawfully maintaining files on the People to be used during the planned unlawful martial law to target dissenters and enslave the People;
- Against Amendment V our servants have accused People in courts not of law incarcerating millions with corrupt Grand Juries and forcing People to witness against themselves, our servants have deprived millions of life, liberty, or property, without due process of law, our servants have seized private property under rem and caprice;
- Against Amendment VI our servants have denied millions of People trials by an impartial jury, our servants have denied assistance of counsel unless they were BAR co-conspirators of the court to stealthily deprive People of their unalienable rights;
- Against Amendment VII our servants have denied suits at common law, our servants have denied trial by jury, our servants have denied the Peoples heritage, common law;
- Against Amendment VIII our servants have imposed excessive bails, fines, cruel and unusual punishments for behaviors that are not crimes;
- Against Amendment IX our servants have denied scores of other unalienable rights retained by the people;
- Against Amendment X our servants have corrupted government at every level and have turned sovereignty of the People into a crime.

At every stage of these oppressions we have petitioned for redress in the most humble terms. Our repeated Petitions have been answered only by repeated injury. Servants whose character is thus marked by every act which may define a Tyrant, is unfit to be the stewards of a free People; we therefore command you to repent and obey the law of the land or face the wrath of We the People.

WAR AGAINST THE CONSTITUTION/PEOPLE BY CONGRESS

Secret construction of a statutory prison

The following is by no means an exhaustive list of usurpations by congress and acts of treason against We the People of the united States of America and our decree of 1789 [Constitution for the United States of America]. To list all would take volumes but the foregoing is an accurate representation of a government that has become destructive.

- 1) Suspension of habeas corpus (Reconstruction Act, 1871) **in violation of Article I Section 9 (paragraph 2)**¹⁹;

¹⁹ **Article I Section 9 paragraph 2** The privilege of the writ of habeas corpus shall not be suspended,

- 2) Reconstituted the United States as a corporate controlled democracy (Reconstruction Act, 1871) **in violation of Article IV Section 4**²⁰;
- 3) Creation of the Federal Reserve which provides for foreign bankers to unlawfully control the United States monetary system (Federal Reserve Act, 1913) and eventually unlawfully disbanded the United States Treasury **in violation of Article I Section 8**;
- 4) Granted the President broad sweeping investigative and prosecutorial powers against anyone, including the American people, found by the President to be an enemy thereby giving the President essentially dictatorial powers. (Trading with the Enemy Act, 1917); **in violation of Article IV Section 4**²¹;
- 5) Disbandment of the United States Treasury (1920) **in violation of Article I Section 8**;
- 6) Registration requirements of the People in order to use the People as chattel (collateral) for the federal notes (Townshend Act, 1925) **in violation of Article III Section 3**²²;
- 7) War against the People of the United States (Trading With the Enemy Act amended, 1933 and Alien Registration Act of 1940) **in violation of Article III Section 3**²³;
- 8) Numerical Identification System to track and control the Peoples' financial business and to apply an unlawful direct tax (Social Security Act, 1935) **in violation of Article I Section 9**²⁴;
- 9) Common law was abrogated (Erie Railroad v Tompkins, 1938) **in violation of Article III Section 2, Article VI, Amendment VII and Amendment V**²⁵;
- 10) Immunity to Judges for their crimes (International Organizations Immunities Act, 1945) **in violation of Article II Section 4**²⁶;
- 11) Corrupted our Grand Juries through government controls (1946) **in violation of Amendment V**;
- 12) Government spying on the People, empowers the government to deploy unwarranted "dragnets" for massive amounts of information on private citizens; (Patriot Act, 2001) **in violation of Amendment IV**²⁷;
- 13) Authorization for government to indefinitely detain American citizens/nationals without probable cause, without warrant, without charges and without due process in law, (National Defense Authorization Act, 2014) **in violation of Amendment V**²⁸;

²⁰ Article IV Section 4. The United States shall guarantee to every state in this union a republican form of government, and shall protect each of them against invasion;

²¹ **Article IV Section 4** The United States shall guarantee to every state in this union a republican form of government, and shall protect each of them against invasion;

²² **Article III Section 3** Treason against the United States shall consist in adhering to their enemies, giving them aid and comfort.

²³ **Article III Section 3** Treason against the United States shall consist in levying war against them.

²⁴ **Article 1 Section 9** No capitation, or other direct, tax shall be laid, unless in proportion to the census or enumeration herein before directed to be taken.

²⁵ **Article III Section 2** The judicial power shall extend to all cases, in law and equity, arising under this Constitution, the laws of the United States..., Article III Section 2 The trial of all crimes shall be by jury; and such trial shall be held in the state where the said crimes shall have been committed; **Article VI** This Constitution, and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding. **Amendment VII** In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise reexamined in any Court of the United States, than according to the rules of the common law. **Amendment V** No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury.

²⁶ **Article II Section 4** The President, Vice President and all civil officers of the United States, shall be removed from office on impeachment for, and conviction of, treason, bribery, or other high crimes and misdemeanors.

²⁷ **Amendment IV** The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

²⁸ **Amendment V** No person shall be deprived of life, liberty, or property, without due process of law;

- 14) Socialism/communist indoctrination taught in our schools (Common Core) **in violation of the will of the People and Article IV Section 4.**²⁹
- 15) 100% control of Peoples movements, food, water, energy and control over the minds of our children (Agenda 21, United Nations passed in 1992 and supported by President George Bush) **in violation of the Constitution for the United States of America, Bill of Rights, Magna Carta and the Holy Bible;**

• ~~WE THE PEOPLE~~ HEREIN ~~DE~~CEREE ALL UNCONSTITUTIONAL LEGISLATION NULL AND VOID •

~~WAR~~ AGAINST THE ~~PEOPLE~~ BY ~~ADMINISTRATIONS~~

Preparation for war by executive legislation

“Necessity is the plea for every infringement of human freedom. It is the argument of tyrants; it is the creed of slaves”. - William Pitt

- 15 Most executive orders end with the phrase “these executive orders don’t define what specifically constitutes a national emergency.” The following executive orders are just a few of 1000’s of executive orders, without authority, that are preparing to take full control over the lives of every man, woman and child in America, under the guise of necessity, these provide for:
- 1) Martial law (executive order #100, aka Lieber Code,1863);
 - 20 2) Formation of the FBI (executive order, 1908);
 - 3) Presidential closing of all the banks in the country (executive order, 1933);
 - 4) Presidential confiscation of gold (executive order, 1933);
 - 5) Presidential removed property rights (executive order, 1933);
 - 6) federal seizure of all communications media in the US (executive order #10995);
 - 25 7) federal seizure of all electric power, fuels and minerals both public & private (executive order #10997);
 - 8) federal seizure of all food supplies and resources, both public and private and all farms and equipment, including what people are storing for emergencies in their homes (executive order #10998);
 - 30 9) federal seizure of all means of transportation, including cars, trucks, or vehicles of any kind and total control over all highways, seaports and water ways (executive order #10999);
 - 10) federal seizure of American people for work forces under federal supervision, including the splitting up of families if the government so desires (this happened before in Europe during the Nazi regime) (executive order #11000);
 - 35 11) federal seizure of all health, education and welfare facilities, both public and private (executive order #11001);

²⁹ **Preamble** We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America. **Article IV Section 4.** The United States shall guarantee to every state in this union a republican form of government

- 12) the powers the Postmaster General to register every single person in the US (executive order #11002);
- 13) federal seizure of all airports and aircraft (executive order #11003);
- 14) federal seizure of all housing and finances and authority to establish forced relocation, authority to designate areas to be abandoned as "unsafe," establish new locations for populations, relocate communities, build new housing with public funds (executive order #11004);
- 15) federal seizure of all railroads, inland waterways and storage facilities, both public and private (executive order #11005);
- 16) FEMA's complete authorization to put above said orders into effect in times of increased international tension of economic or financial crisis in case of any declared "National Emergency" (executive order #11051);

• WE THE PEOPLE HEREIN DECREE ALL EXECUTIVE ORDERS NULL AND VOID •

WAR AGAINST THE PEOPLE BY JUDICIARY

RICO. 18 USC § 1962 - Prohibited activities (c) It shall be unlawful for any person employed by or associated with any enterprise engaged in, or the activities of which affect, interstate or foreign commerce, to conduct or participate, directly or indirectly, in **the conduct of such enterprise's affairs through a pattern of racketeering activity or collection of unlawful debt.**

The Judiciary denies constitutionally constrained courts of Law and operates under the name of equity when in fact People are hijacked unawares into chancery courts,³⁰ to settle unlawful corporate monetary issues, ruled by Chancellors³¹ a/k/a Judges that have been banned in the United States since 1789.³² The People ordained Law and Equity both of which must adhere to the Law of the Land (common Law) Article VI.³³ The 7th Amendment provides for suits at common law.³⁴ The Fifth Amendment provides for all criminal charges to be by indictment or presentment by a common law grand jury.³⁵ See United States v Williams.

• WE THE PEOPLE HEREIN DECREE CHANCERY COURTS NULL AND VOID •

³⁰ **COURT OF CHANCERY.** A court having the jurisdiction of a chancellor; a court administering equity and proceeding according to the forms and principles of equity. In England, prior to the judicature acts, the style of the court possessing the largest equitable powers and jurisdiction was the "high court of chancery." In some of the United States, the title "court of chancery" is applied to a court possessing general equity powers, distinct from the courts of common law. *Parmeter v. Bourne*, 8 Wash. 45, 35 P. 586; *Bull v. International Power Co.*, 84 N.J.Eq. 209, 93 A. 86, 88. The terms "equity" and "chancery," "court of equity" and "court of chancery," are constantly used as synonymous in the United States. It is presumed that this custom arises from the circumstance that the equity jurisdiction which is exercised by the courts of the various states is assimilated to that possessed by the English courts of chancery. Indeed, in some of the states it is made identical therewith by statute, so far as conformable to our institutions. *Wagner v. Armstrong*, 93 Ohio St. 443, 113 N.E. 397, 401.

³¹ **CHANCELLOR.** (Blacks 4th) In American law, this is the name given in some states to the judge (or the presiding judge) of a court of chancery; The Lord high In England, the highest judicial functionary in the kingdom; He exercises many functions and powers over and above the jurisdiction which he exercises in his judicial capacity in the supreme court of judicature, of which he is the head. *Wharton*.

³² **Article III Section 2** The judicial power shall extend to all cases, in law and equity, arising under this Constitution, the laws of the United States ...

³³ **Article VI** This Constitution, and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.

³⁴ **Amendment VII** In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise reexamined in any Court of the United States, than according to the rules of the common law.

³⁵ **Amendment V** No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury

TAKE JUDICIAL COGNIZANCE³⁶ OF THE ONLY CONSTITUTIONAL POWERS

The “ONLY” lawful powers (21) We the People gave to our legislators are found in Article 1 Section 8.
Whereas Congress shall have power to:

- 1) Tax; *[as defined]*
- 5 2) borrow money;
- 3) regulate *[to make regular]* commerce with foreign nations, and among the several states;
- 4) establish a uniform rule of naturalization;
- 5) uniform bankruptcies laws;
- 6) coin money and fix the standard of weights and measures;
- 10 7) provide for the punishment of counterfeiting;
- 8) establish post offices;
- 9) post roads;
- 10) promote sciences and useful arts;
- 11) constitute tribunals inferior to the Supreme Court;
- 15 12) punish piracies and felonies committed on the high seas;
- 13) declare war;
- 14) grant letters of marque (*A license to a private citizen to seize property of another nation*) and reprisal;
- 15) make rules concerning captures on land and water;
- 16) raise and support armies, and fund no longer term than two years;
- 20 17) provide and maintain a navy;
- 18) make rules for the government and regulation of the land and naval forces;
- 19) provide for calling forth the militia to execute the laws of the union, suppress insurrections and repel invasions;
- 20) provide for organizing, arming, and disciplining, the militia;
- 25 21) exercise exclusive legislation in all cases whatsoever, over such District (not exceeding ten miles square) the seat of the government of the United States and like authority over forts, magazines, arsenals, dockyards, and other needful buildings;
- 22) make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the government of the United States, or in any
- 30 department or officer thereof.

President(s) was given no powers to legislate by executive order, the “ONLY” lawful powers (9) We the People gave to the President are found in Article II Section 2, whereas the President shall have power to:

- 1) be commander in chief of the Army and Navy of the United States, and of the militia of the several states, when called into the actual service of the United States;
- 35 2) require the opinion, in writing, of the principal officer in each of the executive departments, upon any subject relating to the duties of their respective offices, and he shall have power to grant reprieves and pardons for offenses against the United States, except in cases of impeachment;

³⁶ **JUDICIAL COGNIZANCE.** Judicial notice, or knowledge upon which a judge is bound to act without having it proved in evidence. [Black's Law Dictionary, 5th Edition, page 760.] Jurisdiction is the authority by which courts and judicial officers take cognizance of and decide cases. [Board of Trustees of Firemen's Relief and Pension Fund of City of Marietta v. Brooks, 179 Okl. 600, 67 P.2d 4, 6; Morrow v. Corbin, 122 Tex. 553, 62 S.W.2d 641; State v. Barnett, 110 Vt. 221, 3 A.2d 521, 526;]

- 3) by and with the advice and consent of the Senate, to make treaties, provided two thirds of the Senators present concur;
- 4) nominate, and by and with the advice and consent of the Senate, shall appoint ambassadors, other public ministers and consuls, judges of the Supreme Court, and all other officers of the United States, whose appointments are not herein otherwise provided for, and which shall be established by law;
- 5) fill all vacancies that may happen during the recess of the Senate;
- 6) shall from time to time give to the Congress information of the state of the union, and recommend to their consideration such measures as he shall judge necessary and expedient;
- 7) on extraordinary occasions, convene both Houses, or either of them, and in case of disagreement between them;
- 8) shall receive ambassadors and other public ministers;
- 9) shall take care that the laws be faithfully executed, and shall commission all the officers of the United States.

The only lawful jurisdiction given to the courts are under law and equity and both jurisdictions are governed by **Article VI** which decrees:

This Constitution, and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.

The “ONLY” lawful powers we the People gave to the Judiciary are found in **Article III Section 1&2** whereas the Court’s powers are as follows:

- 1) The judicial power of the United States, shall be vested in one Supreme Court, and in such inferior courts as the Congress may from time to time ordain and establish [*federal district courts*];
- 2) The judges, both of the supreme and inferior courts, shall hold their offices during good behavior;
- 3) The judicial power shall extend to all cases, in law and equity arising under:
 - a. this Constitution;
 - b. the laws of the United States;
 - c. treaties made, or which shall be made, under their authority;
 - d. all cases affecting ambassadors, other public ministers and consuls;
 - e. all cases of admiralty and maritime jurisdiction;
 - f. controversies to which the United States shall be a party;
 - g. controversies between two or more states;
 - h. between a state and citizens of another state;
 - i. between citizens of different states;
 - j. between citizens of the same state claiming lands under grants of different states, and between a state, or the citizens there of, and foreign states, citizens or subjects;
 - k. In all cases affecting ambassadors, other public ministers and consuls, and those in which a state shall be party.
- 4) The Supreme Court shall have original jurisdiction in all the other cases before mentioned;
- 5) The Supreme Court shall have appellate jurisdiction, both as to law and fact;

Government servants have been entrusted with the Peoples business and some have abused their power to enslave or sell the American People as cattle. The BAR has beguiled you with power, compartmentalized many, others have turned a blind eye for filthy lucre and some are just useful idiots.

5 Therefore it is conclusive that there are 21 powers given to our legislatures, 9 powers given to the President, 21+ prohibitions and all courts are to act only under common law. Among these powers nowhere can it be found authority from the People to perform any of the aforementioned unconstitutional acts or to create statutes controlling the behavior of the People, private corporation administrative acts and rules, a/k/a corporate charters are ~~HEREIN~~ **DECREED NULL AND VOID**.

10 Judges rest upon fraudulent appellate court rulings and statutes that are repugnant to the Constitution while they convince themselves that by following such statutes they are immune from penalties should the People become aware of their fraud. Take notice we are aware of the fraud and your feeble response is misguided and subject to serious legal consequences should you choose to remain silent and fail to act.

15 Because rights are unalienable, legislators cannot legislate (abolish) them away no matter what the BAR has instructed you. Rights come from God and not man; therefore not even the People can give them up for themselves or others. Once we the People ordained common law the law of the land no man can abrogate it; to claim to do so is an act of war against the People and their God.

20 Unconstitutional acts are not law³⁸ and no one is bound to obey them.³⁹ Judges are expected to maintain a high standard of judicial performance⁴⁰ and when they violate the Constitution they cease to represent the government,⁴¹ become liable for damages⁴² and lose any immunity they may think they have.⁴³ *"State Judges, as well as federal, have the responsibility to respect and protect persons from violations of federal constitutional rights."*⁴⁴ *"Decency, security and liberty alike demand that government officials be subjected to the same rules of conduct that are commands to the citizen;"*⁴⁵ *"Judges have no more right to decline the exercise of jurisdiction which is given, than to usurp that which is not given. The one or the other would be treason to the Constitution."*⁴⁶ *"No judicial process, whatever form it may assume, can have any lawful authority outside of the limits of the jurisdiction of the court or judge by whom it is issued; and an attempt to enforce it beyond these boundaries is nothing less than lawless violence."*⁴⁷

³⁸ "An unconstitutional act is not law; it confers no right; it imposes no duties; affords no protection; it creates no office; it is in legal contemplation, as inoperative as though it had never been passed." **Norton vs Shelby County 118 US 425 p. 442**

³⁹ "No one is bound to obey an unconstitutional law and no courts are bound to enforce it." **16th American Jurisprudence 2d, Section 177 late 2nd, Section 256**

⁴⁰ "Judges must maintain a high standard of judicial performance with particular emphasis upon conducting litigation with scrupulous fairness and impartiality." **28 USCA 2411; Pfizer v. Lord, 456 F 2d 532; cert denied 92 S Ct 2411; US Ct App MN, (1972).**

⁴¹ "...an...officer who acts in violation of the Constitution ceases to represent the government." **Brookfield Co. v Stuart, (1964) 234 F. Supp 94, 99 (U.S.D.C., Wash.D.C.)**

⁴² "...an officer may be held liable in damages to any person injured in consequence of a breach of any of the duties connected with his office...The liability for nonfeasance, misfeasance, and for malfeasance in office is in his 'individual', not his official capacity..." **70 AmJur2nd Sec. 50, VII Civil Liability.**

⁴³ "Government immunity violates the common law maxim that everyone shall have a remedy for an injury done to his person or property." **Firemens Ins. Co. of Newark, N.J. v. Washburn County, 2 Wisc 2d 214 (1957)**

⁴⁴ **Gross v. State of Illinois, 312 F 2d 257; (1963)**

⁴⁵ "Decency, security, and liberty alike demand that government officials be subjected to the same rules of conduct that are commands to the citizen. In a Government of laws, existence of the government will be imperiled if it fails to observe the law scrupulously. Crime is contagious. If government becomes a lawbreaker, it breeds contempt for the law...it invites every man to become a law unto himself...and against that pernicious doctrine, this court should resolutely set its face." **Olmstead v U.S., 277 US 348, 485; 48 S. Ct. 564, 575; 72 LEd 944.**

⁴⁶ **Cohen v. Virginia, (1821), 6 Wheat. 264 and U.S. v. Will, 449 U.S. 200**

⁴⁷ **Ableman v. Booth, 21 Howard 506 (1859)**

Therefore all servants acting in concert under color of law, statute, regulations, and custom that are willfully or ignorantly depriving the People of our unalienable rights and immunities secured and protected by the Constitution for the United States of America are hereby ordered to stand down, correct this matter by signing the attached Mandamus and by such actions we will accept that you are attempting to take responsibility for past abuses and making a good faith effort to amend bad behaviors beginning now and we the People will move forward without looking behind.

Let us remind you that governments are instituted among Men, deriving their just powers from the consent of the governed, that whenever any Form of Government becomes destructive of these ends, it is the Right [and duty] of the People to alter it.

10

WHEREFORE, WE THE PEOPLE BY OUR OWN PREROGATIVE UNDER SEAL COMMAND the accounting of your Stewardship by Obeying and Answering the following under penalty of perjury:

Answers through counsel are insulting, placing salt upon open wounds and will be determined as non-answers and thereby have been predetermined by the People to be in non-compliance and will result in the issuance of a true bill presentment upon all conspirators, clerks, lawyers and judiciary alike.

Answers by the sending of repugnant forms or the returning of quo warranto have also been predetermined by the People to be in non-compliance and will result in the issuance of a true bill presentment upon both clerk and conspiring judiciary.

All federal judges are COMMANDED to comply and obey the common law as defined under the Article VI paragraph 2 of the common law United States Constitution and its common law capstone Bill of Prohibition [Rights]. You have a duty to speak and act; therefore silence can only be interpreted as complicity with the conspiracy to over throw the Peoples' government of the United States of America.

- i. Failure to preserve, protect and defend the Constitution for the United States Article II Section 1 is to war against the People;
- ii. Failure to secure the blessings of liberty Preamble is to war against the People;
- iii. Failure to repel and protect each state against invasions from within to destroy the Peoples' Republican form of government Article IV Section 4 and Article I Section 8 paragraph 15 is to war against the People.

Every day you resist the will of the People, U.S. Constitution, places Liberty in greater jeopardy and in so doing We the People will hold you responsible and will require compliance to the utmost weight of the highest law, for the domestic enemy of our Republic cannot endure without your support because you alone are holding in the balance Peace or War.

YOU ARE HEREBY ORDERED:

- 1) To order all clerks to obey the law by filing and processing all True Bills from common law grand juries as required by law under 18 USC §2076 & §2071;
- 2) All judges are ordered to command all state and federal judges to obey the law of the land as commanded, United States Constitution Article VI paragraph 2;
- 3) All judges are ordered to sign and mail [*to address above*] the attached Mandamus which commands all servants in all courts to cease from obstruction and interference of the Peoples business and access to their courts under 18 USC §1512b;
- 4) All judges are to confirm with the court clerks that this Quo Warranto has been filed as required by 18 USC §2076 & §2071 and a time stamped copy has been mailed to the address above;
- 5) All judges are to produce a certified copy of your constitutional oath of office, as required by Article VI, Paragraph 3 of the Constitution and 5 USC § 3331;
- 6) All judges are to produce affidavits declaring that you did not pay for or otherwise make or promise consideration to secure your office as per 5 USC § 3332;
- 7) All judges are to produce their personal surety bond; and documentation that establishes your complete line of chain of command delegated authority, including all intermediaries, beginning with the President of the United States, or the Governor of the State you claim authority from;
- 8) These documents should all be filed as public records pursuant to 5 USC §2906 for requirements concerning filing oaths. In the event you do not have a personal surety bond, you may provide a copy of your financial statement, which you are required to file annually. Your financial statement will be construed as a private treaty surety bond in the event that you exceed lawful authority.

YOU ARE COMMANDED, UNDER SEAL to obey items 1 and 2 and provide within seven (7) calendar days from receipt of this demand by mail; items 3 through 8 to the address above **OR** resign your office immediately. Failure to comply with all the demands of this Writ of Quo Warranto will be an admission of your intentional and willful engagement in RICO and HIGH-TREASON against the People and will be subject to presentments or indictments for immediate removal from office and criminal prosecution for the committing of illicit and on-going crimes in a wheel and chain of conspiracy.

Signed and so ORDERED by the People under SEAL, November 10, 2014:

Grand Jury Foreman

**IN THE UNITED STATES DISTRICT COURT
FOR _____**

WRIT OF MANDAMUS

The United States District Court for _____ district of _____ State orders all State, County, City, Town, and Villages Judges; Court Clerks; County Clerks; County Sheriffs to obey the Law of the Land;

Article VI Clause 2. This Constitution, and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.

The United States Constitution guarantees to every state in this union and the People thereof, a constitutional republican form of government that the judiciary and all oath takers must obey.

Therefore all State, County, City, Town, and Villages Judges; Court Clerks; County Clerks; County Sheriffs and United States Marshals are so ordered as follows:

- i. All State, County, City, Town, and Village Judges and clerks are to obey the law of the land specifically defined in Article VI Clause 2
- ii. All State, County, City, Town, and Villages Judges and clerks are to obey under penalty of 18 USC §2071, law of the land, are not to conceal, remove, mutilate or misfile any record, proceeding, paper, document, or other thing filed by the Common Law Grand Juries with the court clerk or county clerk.
- iii. All Federal, State, County, City, Town, and Villages Judges and clerks are to obey under penalty of 18 USC §1512, law of the land, are not to alter, destroy, mutilate, or conceal an object with intent to impair the object’s integrity or availability for use in an official proceeding; or intimidate, threaten, or corruptly persuades another person to withhold a record, document, or other object, from an official proceeding; or obstructs, influences, or impedes any official proceeding.

- iv. All clerks under penalty of 18 USC §2076, law of the land, are to file and are not to refuse or neglect to make or forward any report, certificate, statement, or document from the common law grand jury and all judges are to act upon them as required by law.
- v. Sheriffs took an oath to support and defend the United States Constitution, consequently as per Article VI clause 2 the Laws of the United States are to be obeyed. Therefore upon command under seal of the 5th Amendments Common Law Grand Jury concerning violations, by judges, clerks, prosecutors or any other elected or appointed official of 18 USC § 2071, 18 USC §1512, 18 USC § 2071, 18 USC § 2076 or any other law of the fifty United states of America are to arrest the same for said offences.
- vi. Should the Sheriff fail to perform his duties, upon command under seal of the 5th Amendments Common Law Grand Jury concerning said violations the United States Marshal shall arrest the Sheriff and the Under Sheriff shall perform said duties in the Sheriff's stead.
- vii. Finally, the grand jury is an institution separate from the courts, over whose functioning the courts do not preside, no "supervisory" judicial authority exists. It is a constitutional fixture in its own right belonging to no branch of the institutional government, serving as a kind of buffer or referee between the Government and the people. The grand jury operates in the courthouse and under judicial auspices, operating at arm's length from the judicial branch". The Fifth Amendment's "constitutional guarantee presupposes an investigative body 'acting independently of either prosecuting attorney or judge, unfettered by technical rules. Therefore judges and clerks have no authority to prevent, obstruct or interfere with the peoples' necessary compensation and access into the courts, 18 USC §1512b, in order to operate in the courthouse for the administration of the Common Law Juries.

SO ORDERED AND ADJUDGED

ENTER.

DATED: _____

~ Seal ~

TESTIMONY IN SUPPORT OF SB1037

Hawaii State Senate

Tuesday, March 3, 2015

State Conference Room 211 at 9:05a

Submitted by Lynn B. Wilson, PhD

Chair & Committee Members of the Senate Committee on Ways and Means

Jill Tokuda, Chair; Ronald D. Kouchi; Suzanne Chun Oakland; Donovan M. Dela Cruz; J. Kalani English; Brickwood Galuteria; Breene Harimoto; Lorraine R. Inouye; Gil Riviere; Russell E. Ruderman; Sam Slom

Dear Senators:

I am a cultural anthropologist who has invested over 20 years in supporting the health and well being of young children and their families in Hawaii by partnering with public and private agencies including the Hawaii State Department of Health, UH JABSOM Department of Pediatrics, American Academy of Pediatrics/Hawaii Chapter, community health centers, and early childhood organizations in the areas of health, early learning, family engagement and support. I have also co-founded small businesses with Sharon Taba, MEd, Webfish Pacific, LLC & Same Small Boat Productions, LLC, that have received federal, state, and foundation support to develop projects supporting young children and their families.

I am writing to strongly urge you to support **SB1037: Relating to the Health Impact of Pesticides** because it is so important to protect our keiki.

This proposed law aims to protect communities across the state by establishing mandatory disclosure reporting when restricted use pesticides have been applied.

Research clearly demonstrates that even low exposures to environmental toxins, such as pesticides (including fumigants, herbicides, pesticides, etc.), put healthy brain development in fetuses and young children at tremendous risk. Please see attached policy statements from the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists.

In Hawaii, where agricultural companies are using increasing amounts of pesticides and increasingly using multiple pesticides, acute and chronic exposure can be due to pesticide drift, particulate dust, water we drink and the water we swim in, especially jeopardizing the health of pregnant women and young children as well as the environment itself.

It is particularly large chemical companies that are conducting “experiments,” but not just on their seeds and the various, multiple pesticides they use in seed development. Their outdoor laboratories are also experimenting on the people and the islands of

Hawaii- introducing a combination of “pesticides” (chemicals designed to kill) year round into our islands that research shows can negatively impact human motor-neuron systems, increase autism, and result in endocrine disruption, with dramatic effects on vulnerable populations especially pregnant women and children.

I believe “Good Neighbor” reporting is not enough to protect Hawaii’s families and young children, not enough to protect Hawaii’s lands, animals, and waters—these reports lack specifics of when and where and in what combination pesticides are applied, do not protect families and communities by establishing effective buffer zones, and do not inform surrounding communities in a timely way.

Therefore, it is critical to establish and enforce mandatory reporting of restricted use pesticides. Importantly, this bill does not prohibit governing bodies at the county level from regulating pesticide disclosure, notification, and use from regulating pesticides in a more stringent manner.

Thank you for this opportunity to ask your strong support of **SB1037**. It’s a critical time to pay attention to the “upstream” solutions that will play such a prominent role in positively influencing the health and well being of Hawaii’s communities, families and young children for generations to come.

With Respect & Aloha,

Lynn B. Wilson, PhD

Waipahu, HI 96797



POLICY STATEMENT

Pesticide Exposure in Children

COUNCIL ON ENVIRONMENTAL HEALTH

KEY WORDS

pesticides, toxicity, children, pest control, integrated pest management

ABBREVIATIONS

EPA—Environmental Protection Agency

IPM—integrated pest management

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abstract

FREE

This statement presents the position of the American Academy of Pediatrics on pesticides. Pesticides are a collective term for chemicals intended to kill unwanted insects, plants, molds, and rodents. Children encounter pesticides daily and have unique susceptibilities to their potential toxicity. Acute poisoning risks are clear, and understanding of chronic health implications from both acute and chronic exposure are emerging. Epidemiologic evidence demonstrates associations between early life exposure to pesticides and pediatric cancers, decreased cognitive function, and behavioral problems. Related animal toxicology studies provide supportive biological plausibility for these findings. Recognizing and reducing problematic exposures will require attention to current inadequacies in medical training, public health tracking, and regulatory action on pesticides. Ongoing research describing toxicologic vulnerabilities and exposure factors across the life span are needed to inform regulatory needs and appropriate interventions. Policies that promote integrated pest management, comprehensive pesticide labeling, and marketing practices that incorporate child health considerations will enhance safe use. *Pediatrics* 2012;130:e1757–e1763

INTRODUCTION

Pesticides represent a large group of products designed to kill or harm living organisms from insects to rodents to unwanted plants or animals (eg, rodents), making them inherently toxic (Table 1). Beyond acute poisoning, the influences of low-level exposures on child health are of increasing concern. This policy statement presents the position of the American Academy of Pediatrics on exposure to these products. It was developed in conjunction with a technical report that provides a thorough review of topics presented here: steps that pediatricians should take to identify pesticide poisoning, evaluate patients for pesticide-related illness, provide appropriate treatment, and prevent unnecessary exposure and poisoning.¹ Recommendations for a regulatory agenda are provided as well, recognizing the role of federal agencies in ensuring the safety of children while balancing the positive attributes of pesticides. Repellents reviewed previously (eg, N,N-diethyl-meta-toluamide, commonly known as DEET; picaridin) are not discussed.²

SOURCES AND MECHANISMS OF EXPOSURE

Children encounter pesticides daily in air, food, dust, and soil and on surfaces through home and public lawn or garden application, household insecticide use, application to pets, and agricultural product

TABLE 1 Categories of Pesticides and Major Classes

Pesticide category	Major Classes	Examples
Insecticides	Organophosphates	Malathion, methyl parathion, acephate
	Carbamates	Aldicarb, carbaryl, methomyl, propoxur
	Pyrethroids/pyrethrins	Cypermethrin, fenvalerate, permethrin
	Organochlorines	Lindane
	Neonicotinoids	Imidacloprid
Herbicides	N-phenylpyrazoles	Fipronil
	Phosphonates	Glyphosate
	Chlorophenoxy herbicides	2,4-D, mecoprop
	Dipyridyl herbicides	Diquat, paraquat
Rodenticides	Nonselective	Sodium chlorate
	Anticoagulants	Warfarin, brodifacoum
	Convulsants	Strychnine
	Metabolic poison	Sodium fluoroacetate
Fungicides	Inorganic compounds	Aluminum phosphide
	Thiocarbamates	Metam-sodium
	Triazoles	Fluconazole, myclobutanil, triadimefon
Fumigants	Strobilurins	Pyraclostrobin, picoxystrobin
	Halogenated organic	Methyl bromide, Chloropicrin
	Organic	Carbon disulfide, Hydrogen cyanide, Naphthalene
Miscellaneous	Inorganic	Phosphine
	Arsenicals	Lead arsenate, chromated copper arsenate, arsenic trioxide
	Pyridine	4-aminopyridine

residues.^{3–9} For many children, diet may be the most influential source, as illustrated by an intervention study that placed children on an organic diet (produced without pesticide) and observed drastic and immediate decrease in urinary excretion of pesticide metabolites.¹⁰ In agricultural settings, pesticide spray drift is important for residences near treated crops or by take-home exposure on clothing and footwear of agricultural workers.^{9,11,12} Teen workers may have occupational exposures on the farm or in lawn care.^{13–15} Heavy use of pesticides may also occur in urban pest control.¹⁶

Most serious acute poisoning occurs after unintentional ingestion, although poisoning may also follow inhalational exposure (particularly from fumigants) or significant dermal exposure.¹⁷

ACUTE PESTICIDE TOXICITY

Clinical Signs and Symptoms

High-dose pesticide exposure may result in immediate, devastating, even lethal consequences. Table 2 summarizes features of clinical toxicity for

the major pesticides classes. It highlights the similarities of common classes of pesticides (eg, organophosphates, carbamates, and pyrethroids) and underscores the importance of discriminating among them because treatment modalities differ. Having an index of suspicion based on familiarity with toxic mechanisms and taking an environmental history provides the opportunity for discerning a pesticide's role in clinical decision-making.¹⁸ Pediatric care providers have a poor track record for recognition of acute pesticide poisoning.^{19–21} This reflects their self-reported lack of medical education and self-efficacy on the topic.^{22–26} More in-depth review of acute toxicity and management can be found in the accompanying technical report or recommended resources in Table 3.

The local or regional poison control center plays an important role as a resource for any suspected pesticide poisoning.

There is no current reliable way to determine the incidence of pesticide exposure and illness in US children. Existing data systems, such as the American Association of Poison Control Centers'

National Poison Data System or the National Institute for Occupational Safety and Health's Sentinel Event Notification System for Occupational Risks,^{27,28} capture limited information about acute poisoning and trends over time.

There is also no national systematic reporting on the use of pesticides by consumers or licensed professionals. The last national survey of consumer pesticide use in homes and gardens was in 1993 (Research Triangle Institute study).²⁹

Improved physician education, accessible and reliable biomarkers, and better diagnostic testing methods to readily identify suspected pesticide illness would significantly improve reporting and surveillance. Such tools would be equally important in improving clinical decision-making and reassuring families if pesticides can be eliminated from the differential diagnosis.

The Pesticide Label

The pesticide label contains information for understanding and preventing acute health consequences: the active ingredient; signal words identifying acute toxicity potential; US Environmental Protection Agency (EPA) registration number; directions for use, including protective equipment recommendations, storage, and disposal; and manufacturer's contact information.³⁰ Basic first aid advice is provided, and some labels contain a "note for physicians" with specific relevant medical information. The label does not specify the pesticide class or "other"/"inert" ingredients that may have significant toxicity and can account for up to 99% of the product.

Chronic toxicity information is not included, and labels are predominantly available in English. There is significant use of illegal pesticides (especially in immigrant communities), off-label use, and overuse, underscoring the importance of education, monitoring, and enforcement.³¹

TABLE 2 Common Pesticides: Signs, Symptoms, and Management Considerations^a

Class	Acute Signs and Symptoms	Clinical Considerations
Organophosphate and N-methyl carbamate insecticides	<ul style="list-style-type: none"> • Headache, nausea, vomiting, abdominal pain, and dizziness • Hypersecretion: sweating, salivation, lacrimation, rhinorrhea, diarrhea, and bronchorrhea • Muscle fasciculation and weakness, and respiratory symptoms (bronchospasm, cough, wheezing, and respiratory depression) • Bradycardia, although early on, tachycardia may be present • Miosis • Central nervous system: respiratory depression, lethargy, coma, and seizures 	<ul style="list-style-type: none"> • Obtain red blood cell and plasma cholinesterase levels • Atropine is primary antidote • Pralidoxime is also an antidote for organophosphate and acts as a cholinesterase reactivator • Because carbamates generally produce a reversible cholinesterase inhibition, pralidoxime is not indicated in these poisonings
Pyrethroid insecticides	<ul style="list-style-type: none"> • Similar findings found in organophosphates including the hypersecretion, muscle fasciculation, respiratory symptoms, and seizures • Headache, fatigue, vomiting, diarrhea, and irritability • Dermal: skin irritation and paresthesia 	<ul style="list-style-type: none"> • At times have been mistaken for acute organophosphate or carbamate poisoning • Symptomatic treatment • Treatment with high doses of atropine may yield significant adverse results • Vitamin E oil for dermal symptoms • Supportive care
Neonicotinoid insecticides	<ul style="list-style-type: none"> • Disorientation, severe agitation, drowsiness, dizziness, weakness, and in some situations, loss of consciousness • Vomiting, sore throat, abdominal pain • Ulcerations in upper gastrointestinal tract 	<ul style="list-style-type: none"> • Consider sedation for severe agitation • No available antidote • No available diagnostic test • Supportive care • No available antidote • No available diagnostic test
Fipronil (N-phenylpyrazole insecticides)	<ul style="list-style-type: none"> • Nausea and vomiting • Aphthous ulcers • Altered mental status and coma • Seizures 	<ul style="list-style-type: none"> • Control acute seizures with lorazepam
Lindane (organochlorine insecticide)	<ul style="list-style-type: none"> • Central nervous system: mental status changes and seizures • Paresthesia, tremor, ataxia and hyperreflexia 	<ul style="list-style-type: none"> • Lindane blood level available as send out • Supportive care • Pulmonary effects may be secondary to organic solvent
Glyphosate (phosphonate herbicides)	<ul style="list-style-type: none"> • Nausea and vomiting • Aspiration pneumonia type syndrome • Hypotension, altered mental status, and oliguria in severe cases • Pulmonary effects may in fact be secondary to organic solvent 	<ul style="list-style-type: none"> • Consider urine alkalinization with sodium bicarbonate in IV fluids
Chlorophenoxy herbicides	<ul style="list-style-type: none"> • Skin and mucous membrane irritation • Vomiting, diarrhea, headache, confusion • Metabolic acidosis is the hallmark • Renal failure, hyperkalemia, and hypocalcemia • Probable carcinogen 	<ul style="list-style-type: none"> • Consider PT (international normalized ratio)
Rodenticides (long-acting anticoagulants)	<ul style="list-style-type: none"> • Bleeding: gums, nose, and other mucous membrane sites • Bruising 	<ul style="list-style-type: none"> • Observation may be appropriate for some clinical scenarios in which it is not clear a child even ingested the agent • Vitamin K indicated for active bleeding (IV vitamin K) or for elevated PT (oral vitamin K)

IV, intravenous; PT, prothrombin time.

^a Expanded version of this table is available in the accompanying technical report.¹

CHRONIC EFFECTS

Dosing experiments in animals clearly demonstrate the acute and chronic toxicity potential of multiple pesticides. Many pesticide chemicals are classified by the US EPA as carcinogens. The

past decade has seen an expansion of the epidemiologic evidence base supporting adverse effects after acute and chronic pesticide exposure in children. This includes increasingly sophisticated studies addressing

combined exposures and genetic susceptibility.¹

Chronic toxicity end points identified in epidemiologic studies include adverse birth outcomes including preterm birth, low birth weight, and congenital

TABLE 3 Pesticide and Child Health Resources for the Pediatrician

Topic/Resource	Additional Information	Contact Information
Management of acute pesticide poisoning <i>Recognition and Management of Pesticide Poisonings</i>	Print: fifth (1999) is available in Spanish, English, 6th edition available 2013	http://www.epa.gov/pesticides/safety/healthcare/handbook/handbook.htm 1 (800) 222-1222
Regional Poison Control Centers	Cooperative agreement between Oregon State University and the US EPA. NPMMP provides informational assistance by E-mail in the assessment of human exposure to pesticides	npmmp@oregonstate.edu or by fax at (541) 737-9047
Chronic exposure information and specialty consultation The National Pesticide Medical Monitoring Program (NPMMP)	Coordinated by the Association of Occupational and Environmental Clinics to provide regional academically based free consultation for health care providers	www.aococ.org/PEHSU.htm ; toll-free telephone number (888) 347-AOEC (extension 2632)
Pediatric Environmental Health Specialty Units (PEHSUs)		www.epa.gov/oppfead1/Publications/Cit_Guide/citguide.pdf
Resources for safer approaches to pest control US EPA <i>Citizens Guide to Pest Control and Pesticide Safety</i>	Consumer information documents <ul style="list-style-type: none"> Household pest control Alternatives to chemical pesticides How to choose pesticides How to use, store, and dispose of them safely How to prevent pesticide poisoning How to choose a pest-control company Recommended safest approaches and examples of programs Information on IPM approaches for common home and garden pests	www.epa.gov/pesticides/controlling/index.htm www.ipm.ucdavis.edu
Controlling pests The University of California Integrative Pest Management Program		www.niehs.nih.gov/research/supported/centers/prevention
Other resources National research programs addressing children's health and pesticides	<ul style="list-style-type: none"> NIEHS/EPA Centers for Children's Environmental Health & Disease Prevention Research The National Children's Study Pesticide product labels	www.nationalchildrensstudy.gov/Pages/default.aspx www.epa.gov/pesticides/regulating/labels/product-labels.htm#projects
US EPA		http://toxtown.nlm.nih.gov/text_version/chemicals.php?id=23
The National Library of Medicine "Tox Town"	Section on pesticides that includes a comprehensive and well-organized list of web link resources on pesticides	

anomalies, pediatric cancers, neuro-behavioral and cognitive deficits, and asthma. These are reviewed in the accompanying technical report. The evidence base is most robust for associations to pediatric cancer and adverse neurodevelopment. Multiple case-control studies and evidence reviews support a role for insecticides in risk of brain tumors and acute lymphocytic leukemia. Prospective contemporary birth cohort studies in the United States link early-life exposure to organophosphate insecticides with reductions in IQ and abnormal behaviors associated with attention-deficit/hyperactivity disorder and autism. The need to better understand the health implications of ongoing pesticide use practices on child health has benefited from these observational epidemiologic data.³²

EXPOSURE PREVENTION APPROACHES

The concerning and expanding evidence base of chronic health consequences of pesticide exposure underscores the importance of efforts aimed at decreasing exposure.

Integrated pest management (IPM) is an established but undersupported approach to pest control designed to minimize and, in some cases, replace the use of pesticide chemicals while achieving acceptable control of pest populations.³³ IPM programs and knowledge have been implemented in agriculture and to address weeds and pest control in residential settings and schools, commercial structures, lawn and turf, and community gardens. Reliable resources are available from the US EPA and University of California—Davis (Table 3). Other local policy approaches in use are posting warning signs of pesticide use, restricting spray zone buffers at schools, or restricting specific types of pesticide products in schools. Pediatricians can

play a role in promotion of development of model programs and practices in the communities and schools of their patients.

RECOMMENDATIONS

Three overarching principles can be identified: (1) pesticide exposures are common and cause both acute and chronic effects; (2) pediatricians need to be knowledgeable in pesticide identification, counseling, and management; and (3) governmental actions to improve pesticide safety are needed. Whenever new public policy is developed or existing policy is revised, the wide range of consequences of pesticide use on children and their families should be considered. The American Academy of Pediatrics, through its chapters, committees, councils, sections, and staff, can provide information and support for public policy advocacy efforts. See <http://www.aap.org/advocacy.html> for additional information or contact chapter leadership.

Recommendations to Pediatricians

1. Acute exposures: become familiar with the clinical signs and symptoms of acute intoxication from the major types of pesticides. Be able to translate clinical knowledge about pesticide hazards into an appropriate exposure history for pesticide poisoning.
2. Chronic exposures: become familiar with the subclinical effects of chronic exposures and routes of exposures from the major types of pesticides.
3. Resource identification: know locally available resources for acute toxicity management and chronic low-dose exposure (see Table 3).
4. Pesticide labeling knowledge: Understand the usefulness and limitations of pesticide chemical information on pesticide product labels.
5. Counseling: Ask parents about pesticide use in or around the home to help determine the need for providing targeted anticipatory guidance. Recommend use of minimal-risk products, safe storage practices, and application of IPM (least toxic methods), whenever possible.

6. Advocacy: work with schools and governmental agencies to advocate for application of least toxic pesticides by using IPM principles. Promote community right-to-know procedures when pesticide spraying occurs in public areas.

Recommendations to Government

1. Marketing: ensure that pesticide products as marketed are not attractive to children.
2. Labeling: include chemical ingredient identity on the label and/or the manufacturer's Web site for all product constituents, including inert ingredients, carriers, and solvents. Include a label section specific to "Risks to children," which informs users whether there is evidence that the active or inert ingredients have any known chronic or developmental health concerns for children. Enforce labeling practices that ensure users have adequate information on product contents, acute and chronic toxicity potential, and emergency information. Consider printing or making available labels in Spanish in addition to English.
3. Exposure reduction: set goal to reduce exposure overall. Promote application methods and practices that minimize children's exposure, such as using bait stations and gels, advising against overuse of pediculicides. Promote education regarding proper storage of product.
4. Reporting: make pesticide-related suspected poisoning universally reportable and support a systematic central repository of such incidents to optimize national surveillance.
5. Exportation: aid in identification of least toxic alternatives to pesticide use internationally, and unless safer alternatives are not available or are impossible to implement, ban export of products that are banned or restricted for toxicity concerns in the United States.
6. Safety: continue to evaluate pesticide safety. Enforce community right-to-know procedures when pesticide spraying occurs in public areas. Develop, strengthen, and enforce standards of removal of concerning products for home or child product use. Require development of a human biomarker, such as a urinary or blood measure, that can be used to identify exposure and/or early health implications with new pesticide chemical registration or reregistration of existing products. Developmental toxicity, including endocrine disruption, should be a priority when evaluating new chemicals for licensing or reregistration of existing products.
7. Advance less toxic pesticide alternatives: increase economic incentives for growers who adopt IPM, including less toxic pesticides. Support research to expand and improve IPM in agriculture and nonagricultural pest control.
8. Research: support toxicologic and epidemiologic research to better identify and understand health risks associated with children's exposure to pesticides. Consider supporting another national study of pesticide use in the home and garden setting of US households as a targeted initiative or through cooperation with existing research opportunities (eg, National Children's Study, NHANES).
9. Health provider education and support: support educational efforts to increase the capacity of pediatric health care providers to diagnose and manage acute pesticide

poisoning and reduce pesticide exposure and potential chronic pesticide effects in children. Provide support to systems such as Poison Control Centers to provide timely, expert advice on exposures. Require the development of diagnostic tests to assist providers with diagnosing (and ruling out) pesticide poisoning.

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ERRATA

Spoooner. We Are Still Waiting for Fully Supportive Electronic Health Records in Pediatrics. *Pediatrics*. 2012;130(6):e1674–e1676.

An error occurred in this article by Spooner, titled “We Are Still Waiting for Fully Supportive Electronic Health Records in Pediatrics” published in the December 2012 issue of *Pediatrics* (2012;130[6]:e1674–e1676; originally published online November 19, 2012; doi:10.1542/peds.2012-2724). On page e1674, on line 33, this reads: “The alarming result from the survey was that only 3% of AAP Fellows reported that they had a system that provided all of the items listed by Leu and colleagues.” This should have read: “The alarming result from the survey was that only 9.6% of AAP Fellows reported that they had or planned to adopt within 12 months a system that provided all of the five “pediatric-supportive” items listed by Leu and colleagues.”

doi:10.1542/peds.2013-0134

Auger et al. Medical Home Quality and Readmission Risk for Children Hospitalized With Asthma Exacerbations. *Pediatrics*. 2013;131(1):64–70

An error occurred in this article by Auger et al, titled “Medical Home Quality and Readmission Risk for Children Hospitalized With Asthma Exacerbations” published in the January 2013 issue of *Pediatrics* (2013;131[1]:64–70; doi:10.1542/2012-1055). On page 69, in Table 2 under the heading Adjusted HR, on the line Medicaid, this reads: “0.28 (0.51–1.34).” This should have read: “0.82 (0.51–1.34).”

doi:10.1542/peds.2013-0187

Council on Environmental Health. Policy Statement: Pesticide Exposure in Children. *Pediatrics*. 2012;130(6):e1757–e1763

A couple of errors occurred in this AAP Policy Statement titled “Pesticide Exposure in Children” published in the December 2012 issue of *Pediatrics* (2012;130[6]:e1757–e1763; originally published online November 26, 2012; doi:10.1542/peds.2012-2757). In Table 2, in the second and third columns where glyphosate is discussed, the words “organic solvent” should be replaced with the word “surfactant.” On page e1758, in the first paragraph of the left-hand column, immediately beneath Table 1, the first full sentence should be amended to read: “For many children, diet may be the most influential source, as illustrated by an intervention study that placed children on an organic diet (produced without most conventional pesticides) and observed drastic and immediate decrease in urinary excretion of organophosphate pesticide metabolites.”

doi:10.1542/peds.2013-0576

Robert JR, Karr CJ; Council on Environmental Health. Technical Report: Pesticide Exposure in Children. *Pediatrics*. 2012;130(6):e1765–e1788

Several inaccuracies occurred in this AAP Technical Report titled “Pesticide Exposure in Children” published in the December 2012 issue of *Pediatrics* (2012;130[6]:e1765–e1788; originally published online November 26, 2012; doi:10.1542/peds.2012-2758). On page e1773 and in Tables 1 and 2 where the phosphonate herbicide glyphosate is discussed, changes should be noted. In the first paragraph of the first column on page e1773 about acute glyphosate poisoning, the word “intentional” should be substituted for the word “unintentional.” In this same paragraph as well as in Tables 1 and 2, the word “surfactant” should replace the words “hydrocarbon solvent” and “organic solvent, respectively.” The

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The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS



COMMITTEE OPINION

Number 575 • October 2013

The American College of Obstetricians and Gynecologists Committee on Health Care for Underserved Women

American Society for Reproductive Medicine Practice Committee

The University of California, San Francisco Program on Reproductive Health and the Environment

This Committee Opinion was developed by the American College of Obstetricians and Gynecologists Committee on Health Care for Underserved Women and the American Society for Reproductive Medicine Practice Committee with the assistance of the University of California, San Francisco (UCSF) Program on Reproductive Health and the Environment. The Program on Reproductive Health and the Environment endorses this document. This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. This information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

Exposure to Toxic Environmental Agents

ABSTRACT: Reducing exposure to toxic environmental agents is a critical area of intervention for obstetricians, gynecologists, and other reproductive health care professionals. Patient exposure to toxic environmental chemicals and other stressors is ubiquitous, and preconception and prenatal exposure to toxic environmental agents can have a profound and lasting effect on reproductive health across the life course. Prenatal exposure to certain chemicals has been documented to increase the risk of cancer in childhood; adult male exposure to pesticides is linked to altered semen quality, sterility, and prostate cancer; and postnatal exposure to some pesticides can interfere with all developmental stages of reproductive function in adult females, including puberty, menstruation and ovulation, fertility and fecundity, and menopause. Many environmental factors harmful to reproductive health disproportionately affect vulnerable and underserved populations, which leaves some populations, including underserved women, more vulnerable to adverse reproductive health effects than other populations. The evidence that links exposure to toxic environmental agents and adverse reproductive and developmental health outcomes is sufficiently robust, and the American College of Obstetricians and Gynecologists and the American Society for Reproductive Medicine join leading scientists and other clinical practitioners in calling for timely action to identify and reduce exposure to toxic environmental agents while addressing the consequences of such exposure.

Reproductive Environmental Health

Robust scientific evidence has emerged over the past 15 years, demonstrating that preconception and prenatal exposure to toxic environmental agents can have a profound and lasting effect on reproductive health across the life course (1–3). Exposure to toxic environmental agents also is implicated in increases in adverse reproductive health outcomes that emerged since World War II; these changes have occurred at a rapid rate that cannot be explained by changes in genetics alone, which occur at a slower pace. For additional information, a detailed review is available at www.acog.org/goto/underserved.

Exposure to environmental chemicals and metals in air, water, soil, food, and consumer products is ubiquitous. An analysis of National Health and Nutrition

Examination Survey data from 2003–2004 found that virtually every pregnant woman in the United States is exposed to at least 43 different chemicals (4). Chemicals in pregnant women can cross the placenta, and in some cases, such as with methyl mercury, can accumulate in the fetus, resulting in higher fetal exposure than maternal exposure (5–7). Prenatal exposure to environmental chemicals is linked to various adverse health consequences, and patient exposure at any point in time can lead to harmful reproductive health outcomes. For example, prenatal exposure to certain pesticides has been documented to increase the risk of cancer in childhood; adult male exposure to pesticides is linked to altered semen quality, sterility, and prostate cancer; and postnatal exposure to some pesticides can

interfere with all developmental stages of reproductive function in adult females, including puberty, menstruation and ovulation, fertility and fecundity, and menopause (8). A group of chemicals called endocrine disrupting chemicals has been shown to interfere with the role of certain hormones, homeostasis, and developmental processes (9). They represent a heterogeneous group of agents used in pesticides, plastics, industrial chemicals, and fuels. One study shows that the endocrine disrupting chemical bisphenol-A works in a fashion that is comparable to diethylstilbestrol at the cell and developmental level (10). Likewise, research has clearly shown that many industrial chemicals can affect thyroid function (9, 11). Because of deficiencies in the current regulatory structure, unlike pharmaceuticals, most environmental chemicals have entered the marketplace without comprehensive and standardized information regarding their reproductive or other long-term toxic effects (12).

Vulnerable Populations and Environmental Disparities

Although exposure to toxic environmental agents is ubiquitous among all patient populations, many environmental factors harmful to reproductive health also disproportionately affect vulnerable and underserved populations and are subsumed in issues of environmental justice. In the United States, minority populations are more likely to live in the counties with the highest levels of outdoor air pollution (13) and to be exposed to a variety of indoor pollutants, including lead, allergens, and pesticides than white populations (14). In turn, the effects of exposure to environmental chemicals can be exacerbated by injustice, poverty, neighborhood quality, housing quality, psychosocial stress, and nutritional status (14, 15).

Women with occupational exposure to toxic chemicals also are highly vulnerable to adverse reproductive health outcomes (16). For example, levels of organophosphate pesticides and phthalates measured in occupationally exposed populations are far greater than levels measured in the general population (17, 18). Furthermore, low-wage immigrant populations disproportionately work in occupations associated with a hazardous workplace environment (19, 20).

As underscored by a groundbreaking 2009 report by the National Academy of Sciences, the effects of low-dose exposure to an environmental contaminant may be quite different based on vulnerabilities, such as the underlying health status of the population and the presence of additional or “background” environmental exposure (21). Recognition of environmental disparities is essential for developing and implementing successful and efficient strategies for prevention.

Prevention

The evidence that links exposure to toxic environmental agents and adverse reproductive and developmental health outcomes is sufficiently robust, and the American

College of Obstetricians and Gynecologists (the College) and the American Society for Reproductive Medicine (ASRM) join numerous other health professional organizations in calling for timely action to identify and reduce exposure to toxic environmental agents while addressing the consequences of such exposure (1, 22, 23). Reproductive care providers can be effective in preventing prenatal exposure to environmental threats to health because they are uniquely poised to intervene before and during pregnancy, which is a critical window of human development. An important outcome of pregnancy is no longer just a healthy newborn but a human biologically predisposed to be healthy from birth to old age (3, 24).

Providing Anticipatory Guidance

It is important for health care providers to become knowledgeable about toxic environmental agents that are endemic to their specific geographic areas. Intervention as early as possible during the preconception period is advised to alert patients regarding avoidance of toxic exposure and to ensure beneficial environmental exposure, eg, fresh fruit and vegetables, unprocessed food, outdoor activities, and a safe and nurturing physical and social environment. By the first prenatal care visit, exposure to toxic environmental agents and disruptions of organogenesis may have already occurred. Obtaining a patient history during a preconception visit and the first prenatal visit to identify specific types of exposure that may be harmful to a developing fetus is a key step and also should include queries of the maternal and paternal workplaces. A list of key chemical categories, sources of exposure, and clinical implications are provided in the online companion document to this Committee Opinion (www.acog.org/goto/underserved). Examples of an exposure history are available at http://prhe.ucsf.edu/prhe/clinical_resources.html. Once this exposure inventory has been completed, information should be given regarding the avoidance of exposure to toxic agents at home, in the community, and at work with possible referrals to occupational medicine programs or United States Pediatric Environmental Health Specialty Units if a serious exposure is found (25).

Reproductive care professionals do not need to be experts in environmental health science to provide useful information to patients and refer patients to appropriate specialists when a hazardous exposure is identified. Existing clinical experience and expertise in communicating risks of treatment are largely transferable to environmental health. Physician contact time with a patient does not need to be the primary point of intervention; information and resources about environmental hazards can be successfully incorporated into a childbirth class curriculum or provided in written materials to help parents make optimal choices for themselves and their children (26).

Reporting identified hazards is critical to prevention. For example, the reproductive toxicity of a common solvent used in many consumer products was first

described in a case report of a stillbirth (27). Physicians in the United States are required to report illnesses or injuries that may be work related, and reporting requirements vary by state. No authoritative national list of physician-reporting requirements by state exists. Resources for information about how to report occupational and environmental illnesses include local and state health agencies and the Association of Occupational and Environmental Clinics (<http://www.aoec.org/about.htm>). Illnesses include acute and chronic conditions, such as a skin disease (eg, contact dermatitis), respiratory disorder (eg, occupational asthma), or poisoning (eg, lead poisoning or pesticide intoxication) (28).

Patient-centered actions can reduce body burdens of toxic chemicals (ie, the total amount of chemicals present in the human body at any one time) (29–32). For example, research results document that when children’s diets change from conventional to organic, the levels of pesticides in their bodies decrease (29, 30). Likewise, study results document that avoiding canned food and other dietary sources of bisphenol A can reduce measured levels of the chemical in children and adult family members (31), and that short-term changes in dietary behavior may significantly decrease exposure to phthalates (32).

Clinicians should encourage women in the preconception period and women who are pregnant or lactating to eat fruit, vegetables, beans, legumes, and whole grains every day, to avoid fast food and other processed foods whenever possible, and to limit foods high in animal fat, while providing information about how certain types of food affect health and how individuals can make changes. Also, patients should be advised that some large fish, such as shark, swordfish, king mackerel, and tilefish, are known to contain high levels of methylmercury, which is known to be teratogenic. As such, women in the preconception period and women who are pregnant or lactating should avoid these fish. To gain the benefits of consuming fish, while avoiding the risks of methylmercury consumption, pregnant women should be encouraged to enjoy a variety of other types of fish, including up to 12 ounces a week (two average meals) of a variety of fish and shellfish that are low in mercury. Five of the most commonly eaten seafood items that are low in mercury are shrimp, canned light tuna, salmon, pollock, and catfish. White (albacore) tuna has more mercury than canned light tuna and should be limited to no more than 6 ounces per week. Pregnant women and breastfeeding women should also check local advisories regarding the safety of fish caught in local lakes, rivers, and coastal areas. If no advice is available, they should consume no more than 6 ounces per week (one average meal) of fish caught in local waters and no other fish during that week (33).

Primary Prevention: The Role of Reproductive Care Professionals Beyond the Clinical Setting

Ultimately, evidence-based recommendations for preventing harmful environmental exposure must involve

policy change (34). Action at the individual level can reduce exposure to some toxic chemicals (29, 31, 32) and informed consumer-purchasing patterns can send a signal to the marketplace to help drive societal change (35). However, individuals alone can do little about exposure to toxic environmental agents, such as from air and water pollution, and exposure perpetuated by poverty. The incorporation of the authoritative voice of health care professionals in policy arenas is critical to translating emerging scientific findings into prevention-oriented action on a large scale. Accordingly, many medical associations have taken steps in that direction (23).

For example, in 2009, the Endocrine Society called for improved public policy to identify and regulate endocrine disrupting chemicals and recommended that “until such time as conclusive scientific evidence exists to either prove or disprove harmful effects of substances, a precautionary approach should be taken in the formulation of EDC [endocrine disrupting chemical] policy” (36). Consistent with the clinical imperative to “do no harm,” the precautionary principle states, “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically” (37).

The College and the ASRM join these associations and call on their members to advocate for policies to identify and reduce exposure to environmental toxic agents while addressing the consequences of such exposure. Advancing policies and practices in support of a healthy food system should be pursued as a primary prevention strategy to ensure the health of pregnancies, children, and future generations. The College and ASRM urge the U.S. Environmental Protection Agency and other federal and state agencies to take all necessary actions when reviewing substances to guarantee health and safety. In addition, the College and ASRM fully support rigorous scientific investigation into the causes and prevention of birth defects, including linkages between environmental hazards and adverse reproductive and developmental health outcomes. Timely and effective steps must be taken to ensure the safety of all mothers and infants from toxic environmental agents. Because data are lacking on the safety of most chemicals, careful consideration of the risks posed must be given while the potential immediate and long-term health and genetic risks are evaluated. A chemical should never be released if a concern exists regarding its effect on health.

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TO: Senate Committee on Ways And Means

FROM: Amie M. Stokes

DATE: March 2, 2015

SUBJECT: TESTIMONY IN SUPPORT OF SB 1037 SD1, RELATING TO HEALTH IMPACTS OF PESTICIDES

Aloha Chair Jil N. Tokuda, Vice Chair Ronald D. Kouchi and Esteemed Committee Members,

Thank you for the opportunity to testify in support of this measure. My name is Amie Stokes; I am a Maui County resident. I have two children: Elijah, who is four years old, and Nyomi, who is eight months old. I currently work as an executive assistant to Maui County Council Member Elle Cochran. I have held this position since July 2014. Prior to this position, I was a student at the University of Hawaii at Manoa, studying remotely from Maui. I earned my Bachelor of Arts degree from the University of Hawaii at Manoa in May 2014 in Interdisciplinary Studies with a focus on Natural Resource Management, Ecology, and Indigenous Cultures. I am currently pursuing a Master's degree in Human Resource Management through the University of Hawaii at Manoa, Shidler College of Business. I am expected to graduate in December 2015.

My family and I previously lived at 503 Lauloa Street, Kihei, Maui, Hawaii 96753. My family and I moved onto this property in September 2011, and we moved out of the property in November 2013. The property is adjacent to Monsanto Company's GMO testing fields in Kihei and, as a result, my family and I experienced negative health effects while living on the property. The property is a corner lot on Lauloa Street. Right behind the property is an empty field with Kiawe and dirt trails. Behind this are Monsanto Company's GMO test fields.

My family and I lived on the property for a little over two years. During this time, our landlord's daughter would have regular seizures. On several occasions, an ambulance would be called to take her to the hospital. As far as I am aware, she did not have any predispositions to seizures.

We moved off of the property and into our new house on November 13, 2013. That evening, my son Elijah had a seizure. I took him to Kaiser Permanente medical facility, and they confirmed that he was having a seizure. The doctors conducted an electroencephalogram test and a blood panel and subsequently determined that Elijah had no predisposition to seizures. The doctor stated that the seizure was environmentally induced. I informed the doctor that he had just moved from living next to Monsanto Company's GMO testing fields. The doctor said the seizure could absolutely have been induced from the pesticide spraying. Since my family has moved Upcountry, Elijah has not had any seizures.

While living on the property, I also started experiencing adverse health reactions. I experienced central nervous system issues, including severe mood swings, depression, and headaches.

In addition to the cane smoke, I could taste chemicals on my tongue when I lived on the property. There was a numbing feeling in my mouth. It was not necessarily visible, and there was no noticeable smell,

but the taste was distinct. This strange taste of chemicals happened intermittently, and I noticed it as often as once a week. When I began to taste the chemicals in my mouth, I often would leave the neighborhood.

I believe that establishing disclosure requirements for outdoor applications of pesticides in proximity to schools, child care facilities, and certain commercial agricultural entities, as well as establishing buffer zones will be a step in the right direction for the State of Hawaii. Fiscally speaking, it would behoove the state to have a structure in place that will help mitigate the growing concerns from the public regarding industrial agricultural practices. Considering our state's dependence on agriculture for revenue and our ever growing population's needs that we have for development, which includes schools and care facilities, I feel that it is imperative that the state implement buffer zones and disclosure laws to ensure a harmonious future.

For these reasons I strongly support SB 1037, SD 1 and urge you to move this bill forward today.

Thank you for the opportunity to testify.

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Testimony in **STRONG SUPPORT of SB1037, SD1.**

Relating to the Health Impacts of Pesticides

Committee on Ways and Means

March 3, 2015 at 9:05 AM, Conference Room 211

The Honorable Chair Tokuda, Vice Chair Kouchi and Committee Members,

I am in SUPPORT of SB1037 as I feel it is a necessary element of a complete community pesticide protection program.

FACT: Pesticides are meant to kill living organisms. Many of the organisms pesticides kill share biological and cellular similarities to humans

FACT: Pesticides can have multigenerational impact when humans are exposed to them. From the EPA "Recognition and Management of Pesticide Poisonings" 2013 – 6th edition

FACT: According to the EPA, evidence of diseases related to low-level chronic exposure to pesticides are accumulating and becoming better understood. From the EPA "Recognition and Management of Pesticide Poisonings" 2013 – 6th edition

FACT: EPA & OSHA look at the combination of 2 variables when determining the potential harm to individuals: (the dosage of the chemical exposure) X (the length of time exposed to the chemical)

FACT: The effects of low level chronic exposure can be as damaging if not more harmful than a single large acute poisoning by pesticides.

SB1037 offers minimal assistance in helping Health Care Providers identify potential Pesticide Poisoning and implement appropriate treatment of symptoms. Unfortunately it does nothing to offer protection from pesticide exposure to our children or other vulnerable populations.

According to the EPA Manual titled: Recognition and Management of Pesticide Poisonings (6th Edition, Published in 2013) Medical professionals need immediate information when a patient presents with an unexplainable condition based on their history and current behaviors. Medical professionals also need to be able to look for potential patterns based on pesticide application near a patient's home and unexplainable symptoms especially given the emerging research around low-level chronic pesticide exposure– if for no other reason at least to be able to rule pesticide poisoning out.

Recognition and Management of Pesticide Poisonings has a Detailed Occupational and Environmental Exposure History Questionnaire to be used by Medical Care Providers. One of the key questions in the Environmental Exposure History section is:

“Do you live within a ¼ mile of an agricultural area?”

SB1037 would provide basic information that would allow for an analysis of medical symptomology with environmental conditions and would help health care providers provide appropriate health care to their patients. What information is needed for an analysis of potential environmental factors?

1. Proximity of environmental hazard to patient (location of application compared to patient location). Wind direction and speed would also be needed.
2. Date of symptoms / illness – does this coincide with application dates?

3. What is the specific chemical and does patient exhibit the symptoms associated with exposure to this chemical?
4. How often is the patient exposed to these environmental hazards?

Providing this basic information to Health care providers would allow them to tentatively rule out pesticide poisoning or continue their analysis by employing expensive lab and clinical tests and procedures.

Unfortunately SB1037 does NOT offer any protections from the hazards that are present when pesticides are used.

PESTICIDES DRIFT

Two (2) recent studies on Kauai confirm that pesticides are ending up in places they should not be. Schools and waterways that lead to the ocean.

(1) The University of Hawaii 2013 air sampling study "Air sampling and analysis for pesticide residues and odorous chemicals in and around Waimea, Kaua'i" examined ambient air at Waimea Canyon Middle School (WCMS) and other Kaua'i schools. Five pesticides were detected at WCMS in passive air samplers in both indoor and outdoor sites, as well as high volume air samplers. The pesticides detected by the air samplers were chlorpyrifos, metolachlor, bifenthrin, benzene hexachloride and dichlorodiphenyltrichloroethane (DDT). Some of these are "legacy" pesticides like DDT but some are currently being used on Kaua'i like chlorpyrifos.

I have no reason to doubt that the people using these chemicals in the test fields around the school were applying them according to the label and with best practices in mind, yet, drift occurred and was found in low-level doses.

NOTE: No one is sure which fields these chemicals came from nor the distance from the school because we have had no usable disclosure data.

(2) The Hawaii 2013 – 2014 Statewide Pesticide Sampling Project was a one-time study done across the state which identified numerous concerns about a range of pesticide uses but also had some significant limitations as to analysis. Some of the results confirm that pesticides are ending up in places that they should not.

- 8 water samples taken on Kauai, 2 with glyphosate testing
- Atrazine and metachlor, two restricted use herbicides, were detected at levels that exceeded aquatic life guidelines at 1 location on Kaua'i.
- Five (5) restricted use pesticides were detected at one (1) or more sites with upstream seed corn production.
- Locations where glyphosate testing was done were all positive.
- Study limitations:
 - Local pesticide applications not known,
 - One time sample results cannot assess the real risk,
 - Multiple upstream users – without good disclosure information it is hard to pinpoint the source

I am sure that it was not the intent of the applicator in any of these situations to have the pesticides contaminating our waterways and ultimately the ocean. But drift and measurable contamination is occurring under the current application procedures, although it was not deemed to be at a level of concern for humans, “just” aquatic life. Improvements to pesticide application and additional human protections need to be put in place.

BUFFER ZONES NEED TO BE SIGNIFICANT TO MINIMIZE CONCENTRATED DRIFT

Drift occurs when pesticides are being applied and also as chemicals volatilize in the heat.

These chemicals and their residuals are carried by the wind to areas they were not applied to. On Kauai we have been repeatedly told that spraying cannot be done when winds are over 10 mph.

How long will it take for the wind to carry pesticide drift specific distances? Notice the significant difference between current “Good Neighbor” policy and EPA exposure concern distance.

Wind Speed

	10 miles per hour	7 miles per hour	5 miles per hour
Distance / second	14.6 feet/sec	10.3 feet/sec	7.3 feet/sec
Time to travel 100 feet (Good Neighbor Policy)	6.8 seconds	9.7 seconds	13.7 seconds
Time to travel 500 feet	34 seconds	51.5 seconds	68.5 seconds
Time to Travel 1000 feet	68 seconds	97 seconds	137 seconds
Time to travel 1320 feet (1/4 mile) (EPA Concern Level)	90 seconds	128 seconds	181 seconds
Time to Travel 2640 feet (1/2/mile)	180 seconds	256 seconds	361 seconds

	(3 minutes)		
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The EPA has identified that within a ¼ mile of an agricultural area people are at-risk for receiving adverse exposures to pesticides.

**Currently agricultural workers are at risk
due to substandard protections**

From the EPA:

Pesticides; Agricultural Worker Protection Standard Revisions

a.k.a. AG WPS Revisions (Worker Protection Standards)

Docket No.: [EPA-HQ-OPP-2011-0184-0119 \(What's this?\)](#)

Abstract: On March 19, 2014, the EPA proposed to revise the federal regulations issued under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) that direct agricultural worker protection (40 CFR 170). ([Hide](#))

The proposed changes are in response to extensive stakeholder review of the regulation and its implementation since 1992, and reflect current research on how to mitigate occupational pesticide exposure to agricultural workers and pesticide handlers.

February 20, 2014

Washington, D.C. — In North Carolina and Florida, three babies born in 2005 brought to light in the most painful way what pesticide exposure does to farmworkers and their children. All three babies were born with severe birth defects after their mothers had worked together on tomato farms for the produce company Ag-Mart in both states. **State investigators found hundreds of instances of pesticide safety problems, but were unable to prove pesticide violations in the case, because of loopholes in the Worker Protection Standard—the very pesticide rules they were trying to enforce.**

Today, the U.S. Environmental Protection Agency proposed strengthening the WPS to address many pesticide safety concerns—including those raised in the high-profile birth defects case.

Agricultural workers are not being adequately protected by current standards.

Effects of Low-Level Chronic Exposure

“The effects of chronic, low-level exposures to pesticides on the nervous system are less well understood, but considerable evidence of neurodevelopmental toxicity arising from chronic,

low-level exposure in gestational or early postnatal life is accumulating.” From *EPA Recognition and Management of Pesticide Poisoning*, page 214.

From the same EPA Publication regarding Chronic Effects in School-Age Children:

“A rapidly increasing body of research associates pesticide exposure with behavioral disorders including Attention Deficit and Hyperactivity Disorder (ADHD) and autism spectrum disorder (ASD), which manifests in preschool and school-age children.” Page 216.

DISCLOSURE IS NEEDED

The Statewide Water Sampling Project is an excellent example of why information clearly identifying where pesticides are being applied, dates and times they are being applied, and the concentration / amount being applied is needed. The current “Good Neighbor Program” on Kauai is not really providing very useful information, especially for medical professionals.

Medical professionals need immediate information when a patient presents with an unexplainable condition based on their history and current behaviors. Medical professionals also need to be able to look for potential patterns based on pesticide application near a patient’s home and unexplainable symptoms especially given the emerging research around low-level chronic pesticide exposure– if for no other reason at least to be able to rule pesticide poisoning out.

The fact that pesticide drift moves quickly in the air it is necessary to give pre-notification of pesticide application. The pesticides being sprayed could travel to a school ¼ mile away from the fields within 1 and ½ minutes – too short of a time to take any precautionary actions like closing your windows.

For the people whose homes are only 100’s of feet from these agricultural testing fields their exposures could be almost daily between application drift, pesticide laden windborne dust from the fields and pesticide volatilization from the fields on calmer warmer days.

Hawaii is lagging in protecting citizens from pesticide exposure and in reporting criteria. A California law passed in 1971 requires health providers to report any disease or condition that they know, or have reason to believe resulted from pesticide exposure. If a suspected exposure or pesticide related illness is not reported the health care provider can be fined by the state.

Questions I have:

What studies have been done that show what the effects of combining these pesticides have on humans? Do the chemicals, when mixed either in the tank or in the field, have any additional adverse reactions above those each one individually (like mixing bleach and ammonia)?

What long-term studies have been done that prove low-level long term exposure (like those that students at Waimea Canyon Middle School received) really will not impact them, their offspring or unfortunately their grandchildren? Atrazine studies have shown some very scary and disturbing outcomes at low levels in frogs – are we sure the same isn't happening to humans?

Do you want to live ¼ mile downwind from an agricultural test field spraying Restricted Use Pesticides up to 4 growing seasons each year? Do you want your children living within a ¼ mile of your grandchildren?

Respectfully Submitted,

Pat Gegen

Notes regarding sources of information:

EPA Recognition and Management of Pesticide Poisonings – 6th Edition 2013

Electronic version at [http:// www2.epa.gov/pesticide-worker-safety](http://www2.epa.gov/pesticide-worker-safety)

To read the University of Hawaii 2013 air sampling study google <Kauai stinkweed study> and click on pdf final report.

To read the Hawaii Water Study google <HEER Hawaii Pesticides> or go to <http://health.hawaii.gov/sdwb/files/2014/09/03.Kauai-Water-Quality-Conference-Pesticide-Presentation.pdf>

EPA Worker Protection Standards Revision

Information: <http://yosemite.epa.gov/opei/RuleGate.nsf/byRIN/2070-AJ22#1>

OSHA Permissible exposure limits for chemicals: <https://www.osha.gov/dsg/top>

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Lucia You	Individual	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
cherub	Individual	Support	No

Comments: SUPPORT SB1037, Disclosure of Pesticide Use!

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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Aloha,

I have been a certified applicator of restricted pesticides working in conservation since 2001. I **support** most of this bill, and I'd like to address the cost and impact to farmers and safety and regulation of pesticides. I assume the statute will be corrected to list HDOA as the correct agency for regulation of pesticides.

In every position I have held as a pesticide applicator, at the end of every work day, I have been required to log all the pesticide use information required in this bill. The list of items looks identical to the information required on every federal installation, including military, parks, and refuges, and used as best practice by most programs. The daily work log requires about five minutes to jot down on a spreadsheet or log into a simple database on the computer. It also requires that you pay attention during the day, and count how many loads or packs or ounces of pesticide you use. Modern cell phone apps can collect this data and automatically export it to a central database via wifi or cell connection.

This is just responsible bookkeeping, just as recommended by HDOA Pesticide Branch in their study materials for the restricted pesticide applicator's license. It has been required for restricted pesticides by federal law since at least 1993 (EPA Training Materials). Keeping records is useful to farm operators who can monitor how crops and crop pests respond to applications of pesticides over time, if they choose to do so, and adjust chemical use in a cost effective way. After my husband and I once accidentally treated the same fence line for fire ants on the same day, I photocopied the pesticide record sheet from work, and we started using it on our own farm.

As a supervisor, I led training sessions on each of the common pesticides we used. I would review the detailed pesticide label and the MSDS, or materials safety data sheet. I found it was an embarrassing ordeal, because so many sections of these legal safety data sheets stated that the risk was unknown. Risk of cancer? Unknown. Impact to bees? Unknown. Risk of congenital birth defects? Unknown. Sometimes it would state that a *similar* chemical had no adverse effects. The only reliably completed test was the flammability of the chemical, and the LD50, the dose at which 50% of mice fed the pesticide would die. Later I found out that even when tests are done, cancer screenings are allowed over a 90 day period. In humans, most cancers appear late in life, after many years of exposure, right? What would you expect to see after 90 days? No negative effect. And that's what the MSDSs say, if they say anything at all. I have never understood how a pesticide could be brought to market, despite all these blanks on the required safety documents.

Thank you for the chance to comment,

From: [Jonathan Pascual](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:26:19 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jonathan Pascual

Kihei, HI

From: [Kristin Mack](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:34:22 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and other ag producers; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools. As a livestock producer, I can assure you that we go to great lengths to ensure that any products we use on our livestock and pastures are safe for the long term production of our livestock, as they are one of our greatest investments! In Hawaii, commercial agricultural producers are already a minority. Please help us to promote local ag instead of destroying it for special interests.

Please oppose this bill. Thank you for your time!

Kristin Mack

Kula, HI

From: [Librada Calija](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:38:32 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Librada Calija

Kihei, HI

From: [loie agustin](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:44:08 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

loie agustin

kahului, HI

From: [GRACE FLORESCA](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:46:19 AM

Aloha Chair Tokuda and Committee Members,

Agriculture is already monitored and regulated by the USDA and EPA. And they are doing a great job at it.

Why do we need to spend more tax dollars for redundant jobs?

Can the legislators please focus on an area that needs their real attention which is the rampant and mostly ignored problem of drugs in our state? Drug use is too high and is probably the biggest reason of crime that is happening here.

Leave us farmers alone. We take care of the land. It is where our life comes from.

KILL THIS BILL! SAVE TAX DOLLARS!

Mahalo

GRACE FLORESCA

KAUNAKAKAI, HI

From: [Anie Utrera](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:50:01 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Anie Utrera

Kula, HI

From: [Rick Klemm](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:51:55 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Rick Klemm

Kailua, HI

From: [Princess ann sombreto](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:52:17 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Princess ann sombreto

Kihei, HI

From: [Jerry Tabag](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:52:27 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jerry Tabag

Maui, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: j_matayoshi@hotmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 11:56:15 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Jason Matayoshi	Individual	Oppose	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: [Arnel Cacho](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:01:16 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Arnel Cacho

Kihei, HI

From: [Bonifacio Sombreto](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:01:31 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Bonifacio Sombreto

Kihei, HI

From: [Carl Roth](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:03:34 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Pesticides are used throughout the world to control pests and disease carriers, such as mosquitoes, ticks, and rodents. In Hawaii, pesticides are used to control termites which destroy \$300 Million dollars in homes and schools annually.

Pesticides are also used in agriculture to control weeds, insect infestation, and diseases that can completely destroy a crop. Even organic agriculture uses pesticides.

Pesticides are used by everyone in thousands of forms; We are all responsible for a safe and healthy Hawaii.

Recent studies by the Hawaii Department of Health found more pesticides in urban Honolulu compared to agricultural areas throughout the State. In a review of cancers on Kauai, incidences were lower compared to the rest of the State, with the exception of skin cancer normally associated with fair skin.

Please Kill this Bill...

Your consideration in this matter is greatly appreciated.

Carl Roth

Carl Roth

Mililani, HI

From: [BILL TURNBOUGH](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:16:40 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

BILL TURNBOUGH

ELLISVILLE, MO

From: [Dante Alejo](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:18:25 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Dante Alejo

Kahului, HI

From: [Jerry Tabag](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:23:23 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jerry Tabag

Maui, HI

From: [Arnel Cacho](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:25:07 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Arnel Cacho

Kihei, HI

From: [Andrew Yamada](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:26:57 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Andrew Yamada

Mililani, HI

From: [Michael Bugaoisan](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:51:12 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Michael Bugaoisan

Wailuku, HI

From: [Robert Osgood](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 12:56:56 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Robert Osgood

Kaneohe, HI

From: [Tyler Jones](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:04:50 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Tyler Jones

Kailua, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: carol.k.reimann@monsanto.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 1:05:41 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Carol Reimann	Monsanto	Oppose	No

Comments: Aloha Chair Tokuda and Committee Members, SB1037 unfairly targets the agriculture industry therefore I strongly urge you to oppose this measure. Mahalo, Carol

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From: [Danelle Horner](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:14:06 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Danelle Horner

Kaunakakai, HI

From: [Guy Ward](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:18:49 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture. If the intent of this bill is to prevent pesticide use near schools and hospitals it should not specifically mention farmers or what their acreage is. The existing regulation of pesticides is adequate. If the science finds a reason to change the regulations they will be changed. Currently there is no apparent problem. The impetus for this bill is simply an attack on agricultural methods not condoned by a certain group.

Please do not pass this bill.

Thank you,
Guy Ward

Guy Ward

Hilo, HI

From: [Maria Ballesteros](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:21:49 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Maria Ballesteros

Kihei, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: dean@HawaiiGoesFishing.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 1:22:53 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Dean Sensui	Individual	Oppose	No

Comments: Out of all the pesticides brought into the state, 3% is used in agriculture. 97% is used by everyone else everywhere else. This includes in-home and in-office pest extermination, as well as pesticides used on school grounds in campuses, around golf courses and in restaurants. If the intent of the bill is to protect the general public, it's missing 97% of the potential exposure found not in rural farmland but right where the majority of the population works and plays. Please do not pass this bill. It places an unnecessary and unfair burden upon farmers at a time when we are trying to become less dependent upon imported food. Thank you for your consideration.
Dean Sensui.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Marissa Sabado](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:23:58 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Marissa Sabado

Ewa Beach, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: hekumi808@hotmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 1:29:02 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Helena Miguel	Individual	Oppose	No

Comments: I strongly OPPOSE this bill. To say "all persons or entities that cultivate crops on two hundred or more acres within a single county in any calendar year shall disclose the use of all pesticides in accordance with this section" is discriminating...discriminating against agriculture. No matter how small of an amount ANYONE applies, a pesticide is still a pesticide. And it is only as dangerous as the person applying it. And why isn't bleaching agents and cleaning agents excluded from this? I know that bleach and some cleaning agents are more dangerous than some pesticides that I now of. Please take into consideration my testimony. Thank you for allowing me to voice my opinion on this matter and my opinion is that I OPPOSE it. Please take my testimony in

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From: [Linda Ohira](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:34:07 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Linda Ohira

Kaneohe, HI

From: [Clyde Fukuyama](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:43:45 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Clyde Fukuyama

Kahuku, HI

From: [Lee Green](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:51:53 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Lee Green

Hauula, HI

From: [Joy marie](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 1:56:34 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Joy marie

Kahului, HI

From: [Rosemarie Sijalbo](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:21:35 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and widbce open for interpretation.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Rosemarie Sijalbo

Wailuku, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: rhonda.k.smith@monsanto.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 2:22:00 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Rhonda	Individual	Oppose	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: [Lionel Adachi](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:24:42 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Lionel Adachi

Kaunakakai, HI

From: [Estelita Bolosan](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:31:03 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Estelita Bolosan

Kahului, HI

From: [Daniel Bolosan](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:32:43 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Daniel Bolosan

Kahului, HI

From: [William Walter](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:34:50 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; IT IS SIGNIFICANT TO NOTE THAT THE LARGEST USERS OF PESTICIDES - AND THE LARGEST USERS IN AND AROUND SIGNIFICANTLY POPULATED AREAS ARE THE STATE AND COUNTY GOVERNMENTS - IF THIS IS SO NEEDED, WHY ARE THEY EXCLUDED?

I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Passage of this bill will put in jeopardy farmers, ranchers who commercially grow our food and our economy. These groups are already at a competitive disadvantage competing against foreign and mainland growers. At the margin, many will simply give up farming - further impeding the State's ability to be fed during troubled times.

This bill would also require landowners who lease to farmers to gather monthly statistics from all farmers - many of whom are on very small parcels and operate near subsistence. This will result in disallowing such farmers access to land thus concentrating farming in fewer hands.

it would be one thing if these activities were not already heavily regulated. But they are heavily regulated. Better education and enforcement of what is on the books is called for.

Please Kill this Bill!!!!

William Walter

Keaau, HI

From: [Amalia Quedding](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:35:22 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

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Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Amalia Quedding

Kahului, HI

From: [Resty Gonzales](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:47:46 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Resty Gonzales

kahului, HI

From: [Danilo Quedding](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:48:38 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Danilo Quedding

kahului, HI

From: [Taylor Kellerman](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:55:11 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Taylor Kellerman

Kailua, HI

From: [Ares Corpuz](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:57:41 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Ares Corpuz

Kahului, HI

From: [Lawrence](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:59:07 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Lawrence

Kihei, HI

From: [William Juan](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:59:52 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

William Juan

Kahului, HI

From: [John Carreon](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 2:59:59 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

John Carreon

kahului, HI

From: [renato Diego](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:00:40 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

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Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

renato Diego

kahului, HI

From: [Renato Baoit](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:01:29 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Renato Baoit

kahului, HI

From: [Florentino Agustin](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:01:51 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Florentino Agustin

kahului, HI

From: [Alika Napier](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:08:07 PM

SB 1037: Relating to Pesticides
Tuesday March 3rd, 2015

Position: Opposed

Chair Tokuda and Committee Members:

Aloha, I am Alika Napier of Mililani and I am opposed to SB 1037. I am the fourth generation from my family that has been actively engaged in the agriculture community in Hawaii and an employee of DuPont Pioneer for 16 years. 12 of those 16 years were spent as a Licensed Commercial 1a pesticide applicator. I am opposed to Bill 1037 as it unfairly targets farmers and agriculture. I believe the bill is based upon misinformation and does not address the root cause of concern, which is protecting the public from the misapplication and misuse of pesticides.

Please do not mistake my opposition to this bill as one of insensible disinterest and one whom supports the haphazard use of pesticides. Quite the contrary, I am a father of two children, an eleven and fifteen year old. Their health and safety is my highest concern as a father. And as a responsible pesticide applicator the health and safety of my neighboring community is held to the same high regard. In late January I was with a coworker as he received a call from Mililani Ike school that his son was one of eight students being treated by paramedics due to a strong chemical odor. Six of the eight were taken to an area hospital for treatment. My kids are in the same area and I am concerned for their safety as well, I am able to make contact with them and thankfully they are okay. The school later confirms via letter to parents that it was due to pesticides being applied by a custodian. I want to make it clear that it was a custodian and not a farmer. Again, on October 2014, forty students from Kapolei were treated on campus and six taken to area hospital for treatment due to the misapplication of a pesticide by a homeowner. I want to make clear that it was a homeownerand not a farmer. This same scenario occurred too many times recently with these instances pointing to the misuse of pesticides by school staff or nearby homeowners.... not farmers.

My question is why we are not addressing the root cause of the problem? There is documented misuse by custodial staff and homeowners....not the farmers. Therefore I urge you to support additional funding for the Hawaii Department of Agriculture to educate our communities about the proper use of pesticides

This brings me to my final point, everyone is accountable for the responsible use of pesticides, homeowner, school maintenance staff as well as the pest control tradesman. You've heard it said many times, Two percent of the population are required to feed the other ninety eight percent; why place an additional burden where it has yet to be proven that we are the problem. If we as an island state are to reduce our dependency on imported food, we need to ensure that all viable options are available for the farmer to make the best choice available. We are stewards of the land, community leaders, and raise our families with the same concerns of health and safety concerns as our neighbors. Despite allegations of agricultural pesticides causing widespread harm, the evidence does not support these allegations.

Thank you for the opportunity to testify in opposition to SB 1037, share my knowledge, and clarify some of the misstatements as one who farms for a living.

Aloha.

Alika Napier

Alika Napier

Mililani, HI

From: [Mark Stoutemyer](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:18:11 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Mark Stoutemyer

Kaneohe, HI

From: [Cynthia McCutcheon](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:46:02 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Cynthia McCutcheon

Maunaloa, HI

From: [Antya Miller](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:52:25 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

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Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Antya Miller

Haleiwa, HI

From: [Brandi Beaudet](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 4:11:10 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Brandi Beaudet

Kamuela, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: bbeaudet@parkerranch.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 4:13:57 PM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Brandi Beaudet	Individual	Oppose	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Joan Lasua](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:16:36 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Joan Lasua

Kaunakakai, HI

From: [Jeffery Bertram](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:20:10 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jeffery Bertram

Kihei, HI

From: [Rusty Rueckert](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:20:19 AM

Aloha Chair Tokuda and Committee Members,

I oppose SB 1037, relating to pesticides. This piece of legislation is just another attempt by misinformed groups such as SHAKA that are pursuing a self-righteous crusade to slay fictional evil dragons.

It is obvious because this bill Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Rusty Rueckert

Kihei, HI

From: [Maria](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:20:25 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Maria

kapolei, HI

From: [Valerie Willman](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:22:02 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill. First, there are copious regulations already in place to regulate growing in Hawaii. There is NO evidence that the usage from any Seed Companies or Coffee farmers, are affecting surrounding residents' health in a negative manner. It unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture are not the enemy.

Please Do NOT Support this bill.
Thank you for your service.

Valerie Willman

Eleele, HI

From: [Alicia Braker](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:24:32 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Alicia Braker

Ewa Beach, HI

From: [Paul Gamit](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:32:41 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Paul Gamit

Kaunakakai, HI

From: [Tyler Meier](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:33:11 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Tyler Meier

Wailuku, HI

From: [jason knoche](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:34:54 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

jason knoche

kailua, HI

From: [Danielle Bicoy](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:36:58 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Danielle Bicoy

Kaunakakai, HI

From: [Jaun CamposWhite](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:37:33 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jaun CamposWhite

Kaunakakai, HI

From: [Donovan Gonsalves-Bicoy](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:41:49 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Donovan Gonsalves-Bicoy

waiialua, HI

From: [James Kusakabe](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:43:42 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

James Kusakabe

Wailuku, HI

From: [Dave Kula](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:44:58 AM

Aloha Chair Tokuda and Committee Members,

Well, this will certainly help remove the stigma that Hawaii is not business friendly and, at the same time, show that we are serious about improving our self sustainability !! Shouldn't the Legislature be taking the Big Picture into consideration in responding to proposed legislation?

Please Kill this Bill.

Dave Kula

Wahiawa, HI

From: [Susanna Wilcox](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:46:24 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Susanna Wilcox

kihei, HI

From: [Terri Matsuoka](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:47:15 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Terri Matsuoka

Lawai, HI

From: [Jonathan Allen](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:47:41 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jonathan Allen

Kihei, HI

From: [Eugene Santiago](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:49:18 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Eugene Santiago

Kaunakakai, HI

From: [Pierre Perez](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:51:50 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

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Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Pierre Perez

Maunaloa, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: sasha_98@ymail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 8:52:22 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Sasha Ota	Individual	Oppose	No

Comments: Please hold this anti-farming bill. This is a faux "Right to Know" bill that is specifically targeting only certain farms but not any other of the many pesticide users statewide. It makes no sense whatsoever. Pesticides are used by the counties, homeowners, golf courses, hotels, schools, and environmental and conservation groups. This story is not being told at all. Instead, the pesticide reporting push is one of many scare tactics used to drive the GMO/seed companies out of Hawaii. Please consider this....all of the costly and burdensome information generated by the mandates of this bill will be out of context and therefore not relevant for anyone to make any kind of decision. People don't understand pesticides and how they're used in Hawaii and elsewhere. Even though we use them ever day, even to disinfect our drinking water, people assume they can't be used safely. Until they understand the science and risk analysis...Why do we need to "know" more, when we can't even handle the knowledge we have?

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Sarah Thompson](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:53:45 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Sarah Thompson

Lawai, HI

From: [Camalita](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:56:09 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Camalita

Kahuku, HI

From: [Derrick Thielk](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:58:41 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Farmers are very responsible in their use of pesticides. Pesticides are expensive and therefor a last resort for crop protection. Farmers are good stewards of the land and the communities that they operate in. Farming is also very labor and time intense and this bill will put another burden on the shoulders of those that we depend on.

Please Kill this Bill....

Mahalo

Derrick Thielk

Kaunakakai, HI

From: [David G Rietow](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:03:37 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

David G Rietow

Kamuela, HI

From: [MICHAEL BARLOW](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:08:03 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

MICHAEL BARLOW

KIHEI, HI

From: [Adolph Helm](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:08:07 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Adolph Helm

Hoolehua, HI

From: [Jason Cabamongan](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:08:28 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Farming practices has been around for decades. Pineapple is a perfect example of a crop that has been cultivated on the islands for eons. Planted, sprayed, harvested, consumed... Planted, sprayed, harvested, consumed... Seasons upon seasons, cycles upon cycles. Crops sprawled out for hundreds and hundreds of acres if not thousands.

People have nothing better to do nowadays than to find something to complain about.

If pesticides are "making people sick" then why aren't farm employees getting sick? Common sense ain't so common...

Please Kill this Bill....

Mahalo

Jason Cabamongan

Haleiwa, HI

From: [Edgar Alvarez](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:16:20 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Edgar Alvarez

Kaunakakai, HI

From: [Wainani Cugal](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:19:06 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Wainani Cugal

Kihei, HI

From: [Pamelyn Fukuoka](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:22:49 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture are not the enemy.

Please Kill this Bill....

Pamelyn Fukuoka

Kaunakakai, HI

From: [Richard Takase](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:32:41 AM

Aloha Chair Tokuda and Committee Members,

We strongly oppose this bill as it unfairly targets farmers and agriculture businesses that we support in Hawaii. We also feel that additional funding for the Hawaii Dept. of Agriculture to educate our communities and citizens about the proper use of pesticides is necessary to stop the misinformation. Farmers are land stewards and they understand firsthand the need for crop protection and are educated in methods and pesticides. Farmers live in our communities and their children attend local schools. Farmers and agriculture entities are not the enemy, the enemy is the propaganda that the opposition is spreading to the public.

Please Kill this Bill, or it will do more harm to an already fragile Agricultural industry.

Richard Takase

Richard Takase

Wailuku, HI

From: [Farrah Laguna](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:33:34 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Farrah Laguna

Waialua, HI

From: [Tina England](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:34:24 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; People need to stop attacking the only thing feeding us, farmers and agriculture. I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. There is way too many false accusations out there re: pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy. Without farmers who will feed us???????

Please Kill this Bill....

Tina England

Kihei, HI

From: [Lisa Weiland](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:35:00 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Lisa Weiland

Kaunakakai, HI

From: [Lisa Foster](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:42:25 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Lisa Foster

Kaunakakai, HI

From: [Keoni Gusman](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:43:45 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Keoni Gusman

Makawao, HI

From: [Lawrence Lasua](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:46:17 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Lawrence Lasua

Kaunakakai, HI

From: [Ashley Langen](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:46:25 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Ashley Langen

Koloa, HI

From: [Blake Rabe](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:46:26 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Blake Rabe

Kaunakakai, HI

From: [Winifred Marcos](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:47:07 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Winifred Marcos

Ewa Beach, HI

From: [Andrew Vliet](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:49:05 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Andrew Vliet

Waipahu, HI

From: [Kristen Yeager](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:50:10 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Kristen Yeager

Kihei, HI

From: [Wilfredo Adella Jr](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:58:34 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Wilfredo Adella Jr

Eleele, HI

From: [Roy Asao](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 9:59:18 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Roy Asao

Honolulu, HI

From: [Alicia](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:01:03 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Alicia

Kekaha, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: okekai67@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 10:04:36 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Derrick Thielk	Individual	Oppose	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Kanahele Montizor](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:04:52 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Kanahele Montizor

kaunakakai, HI

From: [David S De Luz Jr](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:07:45 AM

Aloha Chair Tokuda and Committee Members,

I STRONGLY OPPOSE this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Department of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

David S De Luz Jr

Hilo, HI

From: [Roanne LeBrun](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:09:38 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Roanne LeBrun

Pahoa, HI

From: [Randall Yokoyama](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:11:15 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Randall Yokoyama

Kaunakani, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: patricia.guay@monsanto.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 10:16:17 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Patti Guay	Individual	Oppose	No

Comments: I Oppose this bill

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: [Ayna Salas](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:18:44 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Ayna Salas

Kihei, HI

From: [Antonio Pope](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:19:53 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Antonio Pope

Waimea, HI

From: [ayna salas](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:22:04 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

ayna salas

kihei, HI

From: [Luzviminda](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:22:53 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Luzviminda

Kualapuu, HI

From: [J McClure](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:25:45 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

J McClure

Kahului, HI

From: [Kevin Holyoak](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:26:55 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Kevin Holyoak

Makawao, HI

From: [Christina Schonely](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:28:32 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Christina Schonely

Kaunakakai, HI

From: [Melissa Valdez](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:29:47 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Melissa Valdez

Honolulu, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: david.k.makaiwi.iii@monsanto.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 10:30:33 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
David K. Makaiwi III	Individual	Oppose	No

Comments: I have been a license sprayer for over 10yrs ,wouldn't pesticides affect me first? Plus I think this bill is unfair and targets the wrong company. What's good for one is good for all, even the home owners, golf courses, schools and hotels too. Sincerely, David K. Makaiwi III

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: [Don Gerbig](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:32:19 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides. Why does this bill completely ignores urban pesticide use?

Farmers and agriculture is not the enemy. Environmental wackos are.

Please Kill this Bill....

Don Gerbig

Lahaina, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: lho@hawaiiublicpolicy.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 10:34:55 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Adolph Helm	Dow Agrosciences	Oppose	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: [joann bumatay](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:40:12 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

joann bumatay

kualapuu, HI

From: [Matt Lyum](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:43:50 AM

Aloha Chair Tokuda and Committee Members,

I have a landscape company that uses chemicals including pesticides and herbicides on residential properties. There are hundreds of companies like mine in Hawaii that spray or apply chemicals at homes. The acreage would be in the thousands!

Even more pesticide and chemical control companies are doing the same.

Golf Courses, City Parks, Schools, Landscape Nurseries, Hotels and Resorts are also applying pesticides and herbicides on a daily basis?

What is the concern for farmers? Do we not want agriculture in Hawaii?

Please Kill this Bill....

Mahalo

Matt Lyum

Honolulu, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: bjcredibleone@gmail.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 10:46:34 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Blaze Juario	Individual	Oppose	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Daniel Koge](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:47:13 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....and please do not allow those that do not have any true agriculture experience dictate how we work and make a living. We are people too and we deserve to be treated fairly as an industry, not as the 'enemy number one'. We are already regulated by many more structured, respected, legitimate agencies; we do not need more oversight by those who have already taken a side.

Daniel Koge

Kunia, HI

From: [Iponohea Nahoopii-Kaauwai](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:50:17 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Iponohea Nahoopii-Kaauwai

KAUNAKAKAI, HI

From: [Iponohea Nahoopii-Kaauwai](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:53:21 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Iponohea Nahoopii-Kaauwai

KAUNAKAKAI, HI

From: [Jessiebel](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 10:58:52 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Jessiebel

Kahului, HI

From: [Venessa Ochoa](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:05:37 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Venessa Ochoa

Honolulu, HI

From: [John Sim](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:07:13 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

John Sim

Kihei, HI

From: [Yarrow Flower](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:07:39 AM

Aloha Chair Tokuda and Committee Members,

I oppose SB 1037 because it is an anti-agriculture bill that targets Farmers and agriculture ONLY. If pesticide disclosure was a good idea, shouldn't all pesticide users be included? Why is agriculture being targeted when farmers and ranchers don't even use the majority of restricted use pesticides in the state? How can we grow more food locally if farmers keep being penalized?

Please Do not let this poorly written Bill pass!

Yarrow Flower

Makawao, HI

From: [Kristopher](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:09:26 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Kristopher

Kihei, HI

From: [GLENN TOYAMA](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:10:45 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

GLENN TOYAMA

MOUNTAIN VIEW, HI

From: [consolacion](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 11:11:36 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

consolacion

kahului, HI

From: [Joni Kamiya](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 9:04:46 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Joni Kamiya

Kaneohe, HI

From: [Michael Kamiya](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 9:46:51 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Michael Kamiya

Kaneohe, HI

From: [Ramon Cabamongan](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:13:44 PM

Aloha Chair Tokuda and Committee Members,

I've been farming for nearly 30 years and I feel that this SB 1037 is targeting only Farmers and agriculture....
It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any
County of Hawaii....
Demands Mandatory disclosure of all pesticides every month...
The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.
Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's
members.
Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1
Hawaii County.
Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may
not be in cultivation at the time.
Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a
monthly basis.

Please Kill this Bill....

Mahalo
Ramon Cabamongan

Ramon Cabamongan

Honolulu, HI

From: [Wayne Shimokawa](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:36:58 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Wayne Shimokawa

Waimanalo, HI

From: [Bennette Misalucha](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:28:55 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Bennette Misalucha

Aiea, HI

From: [Marlan Graham](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:19:56 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Marlan Graham

Manchester, MO

From: [Jeff Graham](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:31:39 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Jeff Graham

Broomfield, CO

From: [Tom Cooper](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 3:51:23 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Tom Cooper

Koloa, HI

From: [John Meyer](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 4:00:19 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

John Meyer

Quincy, IL

From: [EUGENE O'Leary](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 4:00:42 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

EUGENE O'Leary

Camp Point, IL

From: [Robert Paull](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 5:42:19 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture. In doing so, the Bill fails to recognize the extensive use of pesticides in the urban environment.

In addition, it include an arbitrary threshold for reporting of 200 acres. Problems with pesticides also occur when applied to crops grown by farmers with less than 200 acres.

The Bills exclusions do not in any way help improve the safety of Hawaii's citizens.

I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides.

Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill...

Robert Paull

Honolulu, HI

From: [Lindsay Hashimoto](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 5:55:36 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Lindsay Hashimoto

Lihue, HI

From: [jerry medlock](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 6:05:04 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

jerry medlock

Des Peres, MO

From: [Doug Gray](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 6:32:35 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Doug Gray

Kihei, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: rhcabral@rhomac.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 6:53:04 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Randy Cabral	Individual	Comments Only	No

Comments: Strongly oppose

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Jess Newton](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 6:53:28 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jess Newton

Ballwin, MO

From: [Jaun CamposWhite](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 6:56:49 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Jaun CamposWhite

Kaunakakai, HI

From: [Sarah Thompson](#)
To: [WAM Testimony](#)
Subject: NO FACTS = NO FARMERS = NO FOOD ~ SUPPORT HAWAII AGRICULTURE
Date: Monday, March 02, 2015 7:12:24 AM

Dear Senator(s),

We are writing you today to let you know our concerns in this year's legislative session.

We the undersigned farmers, ranchers floral & nursery growers collectively produce more than 80% of the food and agricultural products grown in Hawaii.

We OPPOSE SB 692; SB 793; SB 801; SB 1037 relating to pesticides. These bills make it unnecessarily more difficult to farm in Hawaii.

We Feed and sustain Hawaii and we have Opposed all Bills that seek to harm Hawaii's farmers. We will continue to Oppose any Bill that threatens our choices, increases burdensome regulation and seeks to do harm to farmers and agriculture. Farmers are under attack from a very vocal minority, it will take everyone who values local food and agriculture production to speak up. This is not the time or place to allow perceptions to dictate public policy. We would appreciate your support of farmers and agriculture in the weeks ahead.

We are pleased and humbled that Chair Tsuji of the House Agriculture Committee and its Members heard our voices last week on HB 1514. We're aware that our supporters submitted more than 1000 letters in Opposition to HB 1514...Historic for farmers!

ACTIVISTS GROUPS HAVE TARGETED FARMERS WITH ANTI-PESTICIDE LEGISLATION ... NO FACTS = NO FARMERS = NO FOOD

Sarah Thompson

Lawai, HI 96765

From: [Precious Corcoran](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:21:46 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Precious Corcoran

Haleiwa, HI

From: [Imelda Castro](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:21:58 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Imelda Castro

Makawao, HI

From: [Josh Hunziker](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:22:09 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Josh Hunziker

Kaunakakai, HI

From: [Joe Para](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:22:11 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Joe Para

Kapolei, HI

From: [TJ MAGBUAL](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:22:32 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

TJ MAGBUAL

Maka, HI

From: [TJ MAGBUAL](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:22:41 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

TJ MAGBUAL

Maka, HI

From: [Xavier-Kaniala Bicoy](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:23:23 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Xavier-Kaniala Bicoy

Kaunakakai, HI

From: [nicole Corcoran](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:23:46 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

nicole Corcoran

Haleiwa, HI

From: [Sarah Sterling](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:24:55 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Sarah Sterling

Waianae, HI

From: [Cecilia Rodriguez](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:25:15 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Cecilia Rodriguez

Kihei, HI

From: [Jessica](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:25:18 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Jessica

Honolulu, HI

From: [Mark Wood](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:25:53 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please take the time to learn where the farms are in relation to schools and homes. Review the data recently published by HDOA on the 16 incidents related to pesticide spray concerns, of which, NONE of the incidents were related to agriculture entities. We cannot have it both ways where we trust using pesticides in our homes, but not trusting farmers with the same technology and training.

I humbly ask you to not pass this bill and send strong support to the agriculture workers HI does support agriculture.

Mark Wood

Mililani, HI

From: [Christopher Pieper](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:28:07 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Christopher Pieper

Kihei, HI

From: [michael von thelen](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:28:40 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

michael von thelen

kapolei, HI

From: [Jody George](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:28:42 AM

Aloha Chair Tokuda and Committee Members,

I believe this bill unfairly targets farmers. Pesticides are used for a variety of purposes, including crop production, invasive species control, home use, and landscaping. Large Farmers, small farmers, county and state governments, resorts, and home owners all use pesticides with similar perceived dangers. Pesticides are safe as long as they are used according to the label, but if there is to be a pesticide disclosure bill it should include everyone.

Please Kill this Bill

Mahalo

Jody George

Honolulu, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: jamcllu@monsanto.com
Subject: *Submitted testimony for SB1037 on Mar 3, 2015 09:05AM*
Date: Monday, March 02, 2015 7:29:19 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Joe McClure	Individual	Oppose	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [David Case](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:29:42 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please use science and not biased opinion when making your decision. Pesticides have been used safely for many years please don't add another layer of regulation that will not benefit the public.

Please Kill this Bill....

Mahalo

David Case

Kihei, HI

From: [Brian Corcoran](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:30:03 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Brian Corcoran

Haleiwa, HI

From: [Brian Hopper](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:30:24 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Brian Hopper

Kihei, HI

From: [Evelyn McDermott](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:30:25 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Evelyn McDermott

Ewa Beach, HI

From: [Loreto Isnec](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:31:07 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Loreto Isnec

Wahiawa, HI

From: [Royden Yamada](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:32:42 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Royden Yamada

Mililani, HI

From: [Christine Holyoak](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:34:14 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Christine Holyoak

Makawao, HI

From: [Vance del Castillo](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:36:24 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Vance del Castillo

Makawao, HI

From: [Edward Okami](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:37:07 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Edward Okami

Haleiwa, HI

From: [Paola Espinoza](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:38:01 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Paola Espinoza

Kihei, HI

From: [Eseta Saole](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:39:12 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Eseta Saole

Waianae, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mcblivestock@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 7:40:22 AM

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Michael Bryan	Individual	Oppose	No

Comments: Further regulation on food production is counterproductive and will increase the cost of production which is already straining producers. Pesticides and herbicides are already regulated. Its time we stopped knee jerk reactions to a few at the expense of many.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: [Stephanie whalen](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:41:42 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Stephanie whalen

Kunia, HI

From: [Michele Finley](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:41:46 AM

Aloha Chair Tokuda and Committee Members,

I oppose SB 1037 because it targets farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please oppose SB 1037.

Mahalo

Michele Finley

Kaunakakai, HI

From: [Gabriel Rolandelli](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:43:42 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Gabriel Rolandelli

Kihei, HI

From: [Maxelyn Corpuz](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:46:25 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Maxelyn Corpuz

Honolulu, HI

From: [Dennis Miyamoto](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:46:47 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Dennis Miyamoto

Honolulu, HI

From: [Ron Kauhaahaa](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:48:25 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Ron Kauhaahaa

Waipahu, HI

From: [Tristan Esmaguél](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:48:56 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Tristan Esmaguél

Kihei, HI

From: [Tyler Tolmie](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:52:13 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Tyler Tolmie

Kihei, HI

From: [Antya Miller](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:53:30 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture for pesticide inspectors and to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Instead, according to the Dept. of Ag, pesticide incidents that have required school evacuations were caused primarily by nearby homeowners that were using pesticides incorrectly. This bill is unfairly targeting large agriculture producers and it goes against the State's constitutionally mandated, long-standing goal of supporting diversified Ag.

Please Kill this Bill....

Antya Miller

Haleiwa, HI

From: [Mark Bartel](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:53:31 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Mark Bartel

Wailuku, HI

From: [Walter Parada](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:53:40 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Walter Parada

Kaunakakai, HI

From: [Aurora Belle Esmaque](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:53:58 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Aurora Belle Esmaque

Kihei, HI

From: [Brian Griffiths](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:54:25 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Brian Griffiths

Kapolei, HI

From: [Jared Schroeder](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:54:39 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Jared Schroeder

Mililani, HI

From: [harold cones](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:56:38 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

harold cones

haleiwa, HI

From: [Jay Ellis](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:58:41 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jay Ellis

Kihei, HI

From: [Kui Ferreira](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:58:52 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Kui Ferreira

Waialua, HI

From: [Lester Doong](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 7:59:35 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Lester Doong

Waipahu, HI

From: [Stacie Sasagawa](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:00:14 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Stacie Sasagawa

Honolulu, HI

From: [Jean Ellis](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:00:40 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Jean Ellis

Kihei, HI

From: [Ming-Li Wang](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:01:24 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Ming-Li Wang

Honolulu, HI

From: [John Pazzelli](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Monday, March 02, 2015 8:14:34 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

John Pazzelli

Ewa Beach, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: shannonkona@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 8:53:51 AM

SB1037

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Support	No

Comments: Strongly support. Residents or visitors who have gotten sick after being exposed to pesticides can not be helped at local hospitals or clinics unless doctors know **WHAT** they have been exposed to. How on Earth could any sane legislator be opposed to this bill?

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Terri Matsuoka](#)
To: [WAM Testimony](#)
Subject: NO FACTS = NO FARMERS = NO FOOD ~ SUPPORT HAWAII AGRICULTURE
Date: Saturday, February 28, 2015 9:53:19 PM

Dear Senator(s),

We are writing you today to let you know our concerns in this year's legislative session.

We the undersigned farmers, ranchers floral & nursery growers collectively produce more than 80% of the food and agricultural products grown in Hawaii.

We OPPOSE SB 692; SB 793; SB 801; SB 1037 relating to pesticides. These bills make it unnecessarily more difficult to farm in Hawaii.

We Feed and sustain Hawaii and we have Opposed all Bills that seek to harm Hawaii's farmers. We will continue to Oppose any Bill that threatens our choices, increases burdensome regulation and seeks to do harm to farmers and agriculture. Farmers are under attack from a very vocal minority, it will take everyone who values local food and agriculture production to speak up. This is not the time or place to allow perceptions to dictate public policy. We would appreciate your support of farmers and agriculture in the weeks ahead.

We are pleased and humbled that Chair Tsuji of the House Agriculture Committee and its Members heard our voices last week on HB 1514. We're aware that our supporters submitted more than 1000 letters in Opposition to HB 1514...Historic for farmers!

ACTIVISTS GROUPS HAVE TARGETED FARMERS WITH ANTI-PESTICIDE LEGISLATION ... NO FACTS = NO FARMERS = NO FOOD

Terri Matsuoka

Koloa, HI 96756

From: [Randy Matsuoka](#)
To: [WAM Testimony](#)
Subject: NO FACTS = NO FARMERS = NO FOOD ~ SUPPORT HAWAII AGRICULTURE
Date: Saturday, February 28, 2015 9:54:51 PM

Dear Senator(s),

We are writing you today to let you know our concerns in this year's legislative session.

We the undersigned farmers, ranchers floral & nursery growers collectively produce more than 80% of the food and agricultural products grown in Hawaii.

We OPPOSE SB 692; SB 793; SB 801; SB 1037 relating to pesticides. These bills make it unnecessarily more difficult to farm in Hawaii.

We Feed and sustain Hawaii and we have Opposed all Bills that seek to harm Hawaii's farmers. We will continue to Oppose any Bill that threatens our choices, increases burdensome regulation and seeks to do harm to farmers and agriculture. Farmers are under attack from a very vocal minority, it will take everyone who values local food and agriculture production to speak up. This is not the time or place to allow perceptions to dictate public policy. We would appreciate your support of farmers and agriculture in the weeks ahead.

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ACTIVISTS GROUPS HAVE TARGETED FARMERS WITH ANTI-PESTICIDE LEGISLATION ... NO FACTS = NO FARMERS = NO FOOD

Randy Matsuoka

Koloa, HI 96756

From: [Cynthia Edrada](#)
To: [WAM Testimony](#)
Subject: NO FACTS = NO FARMERS = NO FOOD ~ SUPPORT HAWAII AGRICULTURE
Date: Sunday, March 01, 2015 7:22:18 AM

Dear Senator(s),

We are writing you today to let you know our concerns in this year's legislative session.

We the undersigned farmers, ranchers floral & nursery growers collectively produce more than 80% of the food and agricultural products grown in Hawaii.

We OPPOSE SB 692; SB 793; SB 801; SB 1037 relating to pesticides. These bills make it unnecessarily more difficult to farm in Hawaii.

We Feed and sustain Hawaii and we have Opposed all Bills that seek to harm Hawaii's farmers. We will continue to Oppose any Bill that threatens our choices, increases burdensome regulation and seeks to do harm to farmers and agriculture. Farmers are under attack from a very vocal minority, it will take everyone who values local food and agriculture production to speak up. This is not the time or place to allow perceptions to dictate public policy. We would appreciate your support of farmers and agriculture in the weeks ahead.

We are pleased and humbled that Chair Tsuji of the House Agriculture Committee and its Members heard our voices last week on HB 1514. We're aware that our supporters submitted more than 1000 letters in Opposition to HB 1514...Historic for farmers!

ACTIVISTS GROUPS HAVE TARGETED FARMERS WITH ANTI-PESTICIDE LEGISLATION ... NO FACTS = NO FARMERS = NO FOOD

Cynthia Edrada

Waimea, HI 96796

From: [Lorie Farrell](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 9:04:00 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture.

How does this bill help promote local food sustainability when it adds more regulations and discourages farmers to expand their farm production? Bills such as SB 1037 harm are smallest farmers, least capable of fulfilling additional regulation burdens. They already have 30 regulatory agencies on average, that is enough for any small business.

I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill...

Lorie Farrell

Lorie Farrell

Honokaa, HI

From: [Charlie Iona](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:01:29 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Charlie Iona

Waimea, HI

From: [Robert Gandia](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:09:37 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Robert Gandia

Kekaha, HI

From: [Joe mcclure](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:11:00 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Joe mcclure

kahului, HI

From: [Diana McClure](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:17:45 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Diana McClure

Kahului, HI

From: [Andrew Arce](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:18:55 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Andrew Arce

Hoolehua, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: dario.bernacchi@monsanto.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 10:53:57 AM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Dario Bernacchi	Monsanto	Support	No

Comments: I oppose this bill. It creates unjustifiable processes and burden in areas where there exists already proper and long standing regulations and practices tgovernomg safe pesticide usage and. Impact assessment.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Clifford Hunter](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:55:29 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

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Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Clifford Hunter

Mililani, HI

From: [Arnulfo Mateo](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:59:07 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Arnulfo Mateo

Wahiawa, HI

From: [Darcey Nobriga](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:59:14 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Darcey Nobriga

Laupahoehoe, HI

From: [Yvonne Kealoha](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 10:59:24 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Yvonne Kealoha

Kalaheo, HI

From: [Robin Hammerquist](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:00:36 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Robin Hammerquist

Kihei, HI

From: [Charlie Iona](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:01:20 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

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Demands Mandatory disclosure of all pesticides every month...

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Charlie Iona

Waimea, HI

From: [Adam wojak](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:10:37 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Adam wojak

Kapaa, HI

From: [George Pace](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:15:57 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

George Pace

mountain view, HI

From: [Patrick Rich](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:18:45 AM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Patrick Rich

Kaaawa, HI

From: [JAMES FANG](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:26:05 AM

Aloha Chair Tokuda and Committee Members,

As a plant nursery owner, I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

JAMES FANG

Mountain View, HI

From: [Kathleen Hashimoto](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:32:46 AM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Kathleen Hashimoto

Kailua, HI

From: [Luly Unemori](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:57:16 AM

Aloha Chair Tokuda and Honorable Committee Members,

Please do not support this bill, SB1037. It unfairly targets ag users only, and will only make it harder than it already is for our local farming community to survive. Farmers are not the biggest users of pesticides, and farmers are not the ones spraying closest to schools or hospitals. If we are truly concerned about pesticides near our schools and hospitals, it makes no sense to target ag.

Mahalo!

Luly Unemori

Wailuku, HI

From: [Iris Iwami](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 11:59:07 AM

Chair Tokuda and Committee Members,

I strongly oppose this bill as it unfairly targets farmers and agriculture. Pesticides are used safely when label directions are followed. I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Pesticides are used by all of us. Read the labels for bleach, disinfectants, pool sanitizers, and pest control products.(homeowners, schools, hospitals, etc.) Farmers understand firsthand the need for crop protection methods and pesticides. Farmers and agriculture is not the enemy.

Please Kill this Bill....

Thank you.
Iris Iwami
Honolulu, Hawaii

Iris Iwami

Honolulu, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: IRISIWAMI@YAHOO.COM
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 12:03:22 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Iris Iwami	Individual	Oppose	No

Comments: I strongly oppose this bill. Pesticides are used in our homes, schools, hospitals, and restaurants. They are needed for a variety of reasons such as disinfectants and pest control. This bill unfairly targets agriculture.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Caleb Dohrman](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:06:48 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Caleb Dohrman

mililani, HI

From: [wally johnson](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:12:51 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

wally johnson

kekaha, HI

From: [Gregory Friel](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:13:16 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Gregory Friel

Makawao, HI

From: [John Gordines](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:13:28 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

John Gordines

Kapaa, HI

From: [CHAO TANG CHANG](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:19:39 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

CHAO TANG CHANG

Hilo, HI

From: [Robert "Bobby" Napier](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:30:27 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Robert 'Bobby' Napier

Waipahu, HI

From: [Steven Davis](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:34:39 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be required to provide disclosure:

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Steven Davis

Eleele, HI

From: [Kris Tanahara](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:35:08 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Kris Tanahara

Honolulu, HI

From: [Rhonda Stoltzfus](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:37:07 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo, Rhonda

Rhonda Stoltzfus

Kiehi, HI

From: [peter houle](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:38:23 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

peter houle

keaaau, HI

From: [Randy Yokoyama](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:42:23 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Randy Yokoyama

Lawai, HI

From: [Anstern Gouveia](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:46:49 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Anstern Gouveia

Haiku, HI

From: [DAVID FELL](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:49:48 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

DAVID FELL

Hilo, HI

From: [Kylie Matsuda](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 12:57:28 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Kylie Matsuda

Kahuku, HI

From: [Judah Lum](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 1:01:17 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Judah Lum

Kahuku, HI

From: [Steve Lupkes](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 1:04:35 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Steve Lupkes

Kekaha, HI

From: [Kim Kozuma](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 1:06:24 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Kim Kozuma

Hilo, HI

From: [Shay Sunderland](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 2:17:47 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Shay Sunderland

Mililani, HI

From: [greg heyd](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 2:46:24 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

greg heyd

wailuku, HI

From: [Tim Hering](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 3:23:51 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Tim Hering

Honolulu, HI

From: [Laurie Yoshida](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 3:24:38 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Laurie Yoshida

Lihue, HI

From: [Kui Ferreira](#)
To: [WAM Testimony](#)
Subject: NO FACTS = NO FARMERS = NO FOOD ~ SUPPORT HAWAII AGRICULTURE
Date: Sunday, March 01, 2015 3:26:05 PM

Dear Senator(s),

We are writing you today to let you know our concerns in this year's legislative session.

We the undersigned farmers, ranchers floral & nursery growers collectively produce more than 80% of the food and agricultural products grown in Hawaii.

We OPPOSE SB 692; SB 793; SB 801; SB 1037 relating to pesticides. These bills make it unnecessarily more difficult to farm in Hawaii.

We Feed and sustain Hawaii and we have Opposed all Bills that seek to harm Hawaii's farmers. We will continue to Oppose any Bill that threatens our choices, increases burdensome regulation and seeks to do harm to farmers and agriculture. Farmers are under attack from a very vocal minority, it will take everyone who values local food and agriculture production to speak up. This is not the time or place to allow perceptions to dictate public policy. We would appreciate your support of farmers and agriculture in the weeks ahead.

We are pleased and humbled that Chair Tsuji of the House Agriculture Committee and its Members heard our voices last week on HB 1514. We're aware that our supporters submitted more than 1000 letters in Opposition to HB 1514...Historic for farmers!

ACTIVISTS GROUPS HAVE TARGETED FARMERS WITH ANTI-PESTICIDE LEGISLATION ... NO FACTS = NO FARMERS = NO FOOD

Kui Ferreira

Waialua, HI 96791

From: [Susan Miyasaka](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 3:31:24 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Susan Miyasaka

Hilo, HI

From: [Patricia Kamiya](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 4:40:36 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Patricia Kamiya

Kaneohe, HI

From: [Mario Gaggero](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 6:24:41 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Mario Gaggero

Kihei, HI

From: [Sarah Styan](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 6:33:47 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Sarah Styan

Hanapepe, HI

From: [Terence Moniz](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 6:45:40 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Terence Moniz

Keaau, HI

From: [Audry Nicholson](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 7:01:20 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Audry Nicholson

Waimanalo, HI

From: [Renee Kester](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 8:02:39 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Renee Kester

kaunakakai, HI

From: [Harry Hashimoto](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 8:03:59 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

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Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

If you want to pass this bill make it effect everyone equally all the way down to homeowners. It has been shown that the urban areas have more pesticide contamination then farm lands. If you won't include the biggest problem areas...

Please Kill this Bill....

Mahalo

Harry Hashimoto

Kula, HI

From: [Matt Graham](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 8:05:37 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

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Here are examples of persons who may be Required to make a monthly disclosure...

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Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Matt Graham

Kihei, HI

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: matt.htfa@gmail.com
Subject: Submitted testimony for SB1037 on Mar 3, 2015 09:05AM
Date: Sunday, March 01, 2015 8:10:44 PM

SB1037

Submitted on: 3/1/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Matthew Ross	Individual	Oppose	No

Comments: Please do not pass this bill. It is discriminatory and unnecessarily targets farmers in Hawaii, whom we should be supporting instead of putting out of business. It is clear to me that by forcing farmers to post notices of pesticide use, this bill's true intent is to make them targets of harassment. This isn't the Hawaii I used to know. Please show some Aloha and do not pass this bill.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: [Susan Segawa](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 8:12:55 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

Any rancher that holds more than 200 acres of land under their control for the cultivation of beef cattle.

Hawaii Papaya industry is defined as an entity and therefore may be required to disclose all pesticides used by it's members.

Sweet Potato growers; Ginger Growers...as they are an entity and cultivate on more than 200 acres of land within 1 Hawaii County.

Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Susan Segawa

Hilo, HI

From: [Curt Oishi](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 8:24:01 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Curt Oishi

Hilo, HI

From: [masao nakamura](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 8:33:31 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

masao nakamura

Hilo, HI

From: [Sam Tong](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 8:48:39 PM

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

Sam Tong
808-772-6342

Sam Tong

Honolulu, HI

From: [Gordon Inouye](#)
To: [WAM Testimony](#)
Subject: I OPPOSE SB 1037 - Relating to Pesticides
Date: Sunday, March 01, 2015 9:03:25 PM

Aloha Chair Tokuda and Committee Members,

It Targets Farmers and agriculture ONLY....

It Targets "ANY Person(s) and any entity that collectively grows or cultivates crops on 200 or more acres in any County of Hawaii....

Demands Mandatory disclosure of all pesticides every month...

The Bill reads all persons or entities... "Entities" is not defined therefore its vague and wide open for interpretation.

Here are examples of persons who may be Required to make a monthly disclosure...

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Any farmer who owns, leases or otherwise is responsible for 200+ acres of land; even though all of this land may not be in cultivation at the time.

Any landowner who permits crop cultivation may be required to disclose all pesticides used on all their land on a monthly basis.

Please Kill this Bill....

Mahalo

Gordon Inouye

PAPAIKOU, HI

TESTIMONY BEFORE THE
SENATE COMMITTEE ON WAYS AND MEANS

MARCH 3, 2015

TESTIMONY ON

SB 1037

RELATING TO THE HEALTH IMPACTS OF PESTICIDES

Aloha Honorable Chair Tokuda, Vice Chair Kouchi and Respected Committee Members:

Aloha, my name is Cory Jones

I STRONGLY OPPOSE SB 1037.

I feel this bill unfairly targets larger agricultural operations as apparent the mandatory disclosure requirements for all person entities that cultivate crops on two hundred or more acres within a single county in a calendar year. From the study “2013-2014 State wide Pesticide sampling Pilot Project” <http://health.hawaii.gov/sdwb/files/2014/09/Oahu03WQPPest.pdf>, Conducted by the DOH, HDOA, USGS and CWB. 24 sites statewide tested water samples, 7 site tested bed sediment samples and 7 sites tested Glyphosate these samples were compared to regulatory standards – State and Federal Ambient Water Quality Criteria and EPA Level of Concern (LOC). From the Oahu Detection Summary there were 24 different pesticides and 8 breakdown products found and the most detection’s were from urban and mixed use sites including golf courses. Not from large commercial farms or down stream from such farms that this bill is targeting. The key findings Statewide showed no currently used pesticide exceeded water quality standards and no currently used pesticide exceeded drinking water standards. But did find a banned residential termite treatment exceeded WQS in 3 urban streams on Oahu. The study does say that one time sampling results can’t assess risk and in my opinion the sample size was too small to have 100% confidence in the results. But it does show that the issue with pesticides is not limited to large agricultural farms and in many cases it is increased in residential and urban areas I feel due to ease of availability of pesticides and the untrained use of residential applications. If the problem and intent of this bill is to reduce pesticide use, then look at all pesticide use in the State of Hawaii and not target only a certain demographic that use pesticides. The demographic that this bill is targeting are the one that are extensively trained on safe and correct use, require a license to apply and have to purchase expensive pesticides. I don’t know of a single farmer that would go out and spray pesticides for no good reason if it was not absolutely necessary to protect his investment and save his crop or would go out and intentionally spray in an unsafe manner.

Thank you very much for your time and consideration and I ask that you stop this bill

Sincerely,

Cory Jones,
Kaunakakai, Molokai

Personal Testimony Presented before the Senate Committee on Ways and Means March 3, 2015 at 9:05 am by Douglas L. Vincent, Ph.D., P.A.S.

SB 1037 SD1 – RELATING TO THE HEALTH IMPACTS OF PESTICIDES

Personal Testimony in Opposition to SB 1037, SD1

Chair Tokuda, Vice Chair Kouchi and members of the committees

My name is Douglas L. Vincent and I am a Professor and Animal Scientist in the College of Tropical Agriculture and Human Resources in the Department of Human Nutrition, Food and Animal Sciences. I am also a former Department Chair. I have been on the faculty of UHM for nearly 30 years and am a strong supporter of Hawaii agriculture. I am pleased to provide personal testimony on SB 1037, SD1. This testimony does not represent the position of the University of Hawaii nor the College of Tropical Agriculture and Human Resources.

I am opposed to this legislation because it singles out farmers, ranchers and agriculture. What about resort use or golf course use? Pest Control operators? Homeowners often apply pesticides incorrectly. A study by the Hawaii Department of Health found more pesticides in urban Honolulu compared to agricultural areas throughout the state.

Restricted use pesticides are already heavily regulated. The regulations require extensive recordkeeping and strict adherence to the label. Yet this legislation would require additional burdensome regulation, but **not** to all users of RUPs but to farmers and ranchers. How does this help promote local food sustainability when it adds more regulation and discourages farmers to expand their farm production? I support additional funding for the Hawaii Department of Agriculture to expand their educational programs to educate our communities about the proper use of pesticides but to single out farmers, ranchers and other growers of agricultural crops is just wrong. Farmers and Ranchers are not the enemy, not the cause of cancer or autism. They are the convenient targets of activists who oppose GMOs and this bill, singling out farmers and ranchers, will help kill agriculture in the state.

Instead of killing agriculture – kill SB 1037 instead. I oppose SB 1037 SD1. Thank you for listening.

Aloha Chair Tokuda and Committee Members,

I oppose this bill as it unfairly targets farmers and agriculture; I support additional funding for the Hawaii Dept. of Agriculture to educate our communities about the proper use of pesticides. Farmers are land stewards and they understand firsthand the need for crop protection methods and pesticides; we live in our communities and our children attend local schools; Farmers and agriculture is not the enemy.

Please Kill this Bill....

sally Irwin

Haiku, HI

SB1037

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Dawn Bicoy	Individual	Oppose	No

Comments: Honorable Chair Tokuda, Vice Chair Kouchi and Respected Committee Members, As a woman involved and dedicated to the long term success of Hawaii's agriculture, I stand in STRONG OPPOSITION to this measure and respectfully request you not pass this bill. This measure is an another assault on farmers and belittles the rich history and heritage of our Hawaii Agriculture Community. If the proponents of this measure are truly concerned about pesticide safety and volume of use, then a comprehensive look at all pesticide usage should be explored and meaningful policy crafted based on facts supplied by our state agencies, and widely accepted scientific data from other credible experts. If we are to grow our agricultural sector in Hawaii, placing these types of meaningless requirements on our farmers is sure to have the opposite effect. Hawaii's agriculture industry needs the support of our elected officials, not a bill that suggests implied harm. Mahalo for your time and consideration, Dawn

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

Dear Senator(s),

We are writing you today to let you know our concerns in this year's legislative session.

We the undersigned farmers, ranchers floral & nursery growers collectively produce more than 80% of the food and agricultural products grown in Hawaii.

We OPPOSE SB 692; SB 793; SB 801; SB 1037 relating to pesticides. These bills make it unnecessarily more difficult to farm in Hawaii.

We Feed and sustain Hawaii and we have Opposed all Bills that seek to harm Hawaii's farmers. We will continue to Oppose any Bill that threatens our choices, increases burdensome regulation and seeks to do harm to farmers and agriculture. Farmers are under attack from a very vocal minority, it will take everyone who values local food and agriculture production to speak up. This is not the time or place to allow perceptions to dictate public policy. We would appreciate your support of farmers and agriculture in the weeks ahead.

We are pleased and humbled that Chair Tsuji of the House Agriculture Committee and its Members heard our voices last week on HB 1514. We're aware that our supporters submitted more than 1000 letters in Opposition to HB 1514...Historic for farmers!

ACTIVISTS GROUPS HAVE TARGETED FARMERS WITH ANTI-PESTICIDE LEGISLATION ... NO FACTS = NO FARMERS = NO FOOD

Mark Kennett

Kaunakani, HI 96747