From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 1:00 PM
То:	AGRtestimony
Cc:	warrenmcfb@gmail.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

<u>HB2564</u>

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



An Affiliate of the Hawaii Farm Bureau Federation and the American Farm Bureau Federation

TESTIMONY BEFORE THE HOUSE COMMITTEES ON AGRICULTURE and ENERGY & ENVIRONMENTAL PROTECTION

FEBRUARY 9, 2016

TESTIMONY ON HB 2564 RELATING TO AGRICULTURE

(AGR): Chair Tsuji, Vice Chair Onishi and respected committee members, (EEP): Chair Lee, Vice Chair Lowen and respected committee members:

Thank you for the opportunity to submit testimony. The Molokai Farm Bureau on behalf of our commercial farm and ranch families, and value added organizations on the island stand in **STRONG OPPOSITION TO HB 2564**.

Agriculture is the largest sector of our fragile economy on the island of Molokai. Approximately 1 in 10 people on Molokai work in agriculture. As such, we are an island that is both knowledgeable and engaged in agriculture.

To address community concerns a comprehensive approach must start with facts. Unfortunately Bill 2564 misrepresents the facts of pesticides and its use to our Hawaii residents, and introduces a selectively discriminatory view of agriculture. This is truly disingenuous by nature.

The reality is the majority of our Hawaii residents recognize those who are licensed to apply pesticides in our state, do so responsibly. But it is unfortunate that there is a segment that is promoting misinformation, and targeting an industry that actually applies pesticides responsibly and openly reports its use.

The facts are:

- Agriculture only represents 1/3rd (32%) of all actual RUP use in the state of Hawaii (Hawaii Department of Agriculture 2013 RUP Sales Data).
- Since 2006 there have been 16 reported incidents regarding pesticide drift to the Hawaii Department of Agriculture. None were found to be related to agriculture pesticide by large agriculture companies, which would be the companies targeted by this Bill (Department of Ag official memorandum dated 3/03/15).

The questions are:

- If there is sincere concern about pesticide use, why are we not talking about the sectors that actually use the largest percentage of RUPs in this state?
- If the largest sector of RUPs use in Hawaii is directly applied in residential and commercial properties of which we work and reside, and is identified by the EPA as – "DANGER" with skull and crossbones labels – why does this Bill ignore the significance of those type of applications?

Our point is, 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 credible experts.

And if our goal is to grow our agricultural sector in Hawaii, placing these types of meaningless requirements on our farmers and unjustly targeting our farming community is sure to have the opposite effect. Hawaii's agriculture industry needs the support of our elected officials.

Thank you for your time and consideration in not allowing this Bill to move forward. We are in strong opposition to HB 2564.

Josh Hunziker, Vice Chair of the Molokai Farm Bureau

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 12:35 PM
То:	AGRtestimony
Cc:	equality4peace@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

<u>HB2564</u>

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Betty C. Dudney	Golden Rule Family.org	Support	No

Comments: We all will eventually suffer from GMO's farming primarily to further enrich for profit of the few, and ever increasing pesticide use in farming and products, but Our children suffer the most right now from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water nearby. Please support HB 2564 and protect our keiki. Thank you for your time. Betty C. Dudney, Co-founder of Golden Rule Family.org

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



MOLOKAI CHAMBER OF COMMERCE

P.O. Box 515 Kaunakakai, HI 96748

T 808 646 0928

info@molokaichamber.org

www.molokaichamber.org

February 8, 2016

HOUSE OF REPRESENTATIVES THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2016

COMMITTEE ON AGRICULTURE Rep. Clift Tsuji, Chair Rep. Richard H.K. Onishi, Vice Chair

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

Tuesday, February 09, 2016 8:30 a.m. Conference Room 325 State Capitol, 415 South Beretania Street

Opposition to HB 2564 RELATING TO AGRICULTURE. Vegetative Buffer Zones

Honorable Agriculture Committee Chair Tsuji, Vice Chair Onishi and Committee Members, and Honorable Energy & Environmental Protection Committee Chair Lee, Vice Chair Lowen and Committee Members:

As a representative organization of the neighbor-island of Molokai with dozens of members who employ hundreds of our neighbors, friends and families, we are respectfully submitting testimony in Opposition to HB 2564.

Although this bill may appear to be well intended, the reasoning behind it is severely flawed, it contains multiple inaccuracies and it has no basis in fact or credible data.

In fact, in a memo from the Hawaii Department of Agriculture dated March 3, 2015, of the sixteen reported school evacuations related to pesticide drift since 2006, none were a result of the type of agriculture operations described in the bill. Most were a result of homeowner use and even one resulted from the use of a school custodian.

If the intent of this bill as stated is "FOR THE PROTECTION OF CHILDREN FROM UNINTENDED PESTICIDE EXPOSURE" it is curious that it does not address any of the situations that actually caused school evacuations as a result of pesticide drift, and even provides an exemption for the application of RUP's on school property where the children, their families, the public and school staff and administrators spend the majority of their day during the school year.

The unintended consequences of this bill could be devastating to our small business farmers that may be mis-categorized as a "commercial agricultural entity" and fall within the yet to be defined RUP purchase amounts and lie within the yet to be determined geographic boundary of schools, not to mention the precedence this would set for enacting science based legislation with no basis in scientific fact.

Being an island that relies on agriculture for our very economic existence and well being, we appreciate your attention to our testimony and humbly ask you oppose passage of this bill and hold it in your respective committees.

Sincerely,

Robert Stephenson, President & CEO

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 11:57 AM
То:	AGRtestimony
Cc:	blake@pixi.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

<u>HB2564</u>

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Blake Drolson	GMO Free Kauai	Support	No

Comments: GMO Free Kaua'i strongly supports the original bill to intrduce this pilot progam to protect out children from harmful pesticide exposure. We strongly oppose any "right to farm" amendment to the bill that would take away counties rights to regulate pesticde use in their communities.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

AGRtestimony

From:	Joy Gold <joy@joygoldunlimited.com></joy@joygoldunlimited.com>
Sent:	Monday, February 08, 2016 11:08 AM
To:	AGRtestimony
Cc:	Larry Jefts (ljefts@aloha.net)
Subject:	HB2564, Agriculture - Hse AGR Hearing, Tues Feb 9 - 8:30 am
Attachments:	LJF_HB2564_HseAGR_EEP.pdf

Aloha,

On behalf of Larry Jefts, owner and operator of Larry Jefts Farms, LLC, please see the attached testimony for HB2564, Relating to Agriculture (Vegetative Buffers) House AGR Hearing Tues. Feb 9– 8:30 am Room 325

Please call me on my cell phone 808-368-1146 if there are any questions about the testimony submittal. Thank you, Joy Gold

CONFIDENTIALITY NOTICE: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.



Paia, Hawaii, 9	3779	A LOT CA COOR WAREA
R NAME AND ADDRESS OF PRODUCER	f different from 6 allove)	
10. RELATED SAMPLE NO.(S) 072711-01-MA-LC to07271 11. RESULTS OF ANALYSIS	1-05-MA-LC,072711-07-MA-LC,072711-08	-MA-LC 080311-01-HA-GS 080311-02-HA-GS
	2,4D 47.4	5ng
2, 4D: 47.45ng Dicamba: 93.84ng Ametryn: 34.63ng Diuron: 103.70ng	Dicamba 93	



Alleuyii 34.0411g Diuron 103.70ng Hexazinone 20.555ng Pendimethalin 38.95ng

SHOULD YOU HAVE ANY QUESTIONS REGARDING THIS REPORT OF ANALYSIS, PLEASE CONTACT THE UNCERSIGNED.

NAME OF AUTHORIZED DOA OFFICIAL Thomask. Matsuch

State of Hawaii DEPARTMENT OF AGRICULTURE Division of Plant Industry Branch



From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, February 05, 2016 3:40 PM
То:	AGRtestimony
Cc:	fernrosenstiel@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

HB2564

Submitted on: 2/5/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Fern Rosenstiel	'Ohana o Kaua'i	Support	No

Comments: Please support all buffers and protection measures to protect the next generations and future of Hawai'i. Mahalo!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, February 05, 2016 8:51 PM
То:	AGRtestimony
Cc:	wao-hsl@WeAreOne.cc
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

HB2564

Submitted on: 2/5/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	www.WeAreOne.cc	Support	No

Comments: Strongly support a human environment free of pesticide exposure until such time as exposure is proven safe for humans. www.WeAreOne.cc

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



February 9, 2016

The Honorable Clift Tsuji Chair, House Committee on Agriculture

The Honorable Chris Lee Chair, House Committee on Energy and Environmental Protection

Members of the Joint Agriculture Committee and Energy and Environmental Protection Committee

RE: HB 2564; RELATING TO AGRICULTURE (OPPOSE)

Dear Chairman Tsuji, Chairman Lee and Members of the Joint Committee:

On behalf of the Western Plant Health Association (WPHA), I am writing in **opposition** to HB 2564, which would establish a pilot program of vegetative buffers around selected schools in the state. WPHA represents the interests of fertilizer and pesticide manufacturers, agricultural biotechnology providers, and agricultural retailers in Hawaii, California, and Arizona. WPHA appreciates the author's interest in assuring the safety of schools; however, we believe this bill is unnecessary, and will result in additional costs to farmers and the state. The bill could impact commercial agricultural operations that propagate crops adjacent to a subject school. As a result, these farmers will bear the cost of planting unnecessary additional buffers, as well as the loss of income of arable acreage.

There is little evidence to support the premise that safeguards from pesticide exposure are needed through additional buffers. Pesticide registrants who provide products used around sensitive population centers must provide United States Environmental Protection Agency (USEPA) proof of their safety through multiple exposure scenario studies specific to these settings. These rigorous studies are designed by the USEPA to ensure safe use protocols are developed. USEPA specifically establishes use requirements in recognition of use in these settings. If USEPA's scientific analysis results in a determination that buffers or use restrictions are needed to protect surrounding communities or sensitive populations, then USEPA requires these measures as part of the product label. Farmers and applicators are legally required to provide these safeguards as part of application protocols.

These safeguards are effective. Last year, the Hawaii Department of Agriculture (DOA) conducted an analysis of school related pesticide complaints over the last

several years. See attached March 3, 2015 memorandum. Through this analysis it was determined that allegations of pesticide exposure causing widespread harm are inaccurate. The report clearly demonstrated that the majority of complaints were from home use products, and there have been **no drift incidents** impacting schools from any farms including large-scale agricultural operations.

Yet, HB 2564 will require the establishment of additional buffers around pilot schools. Mandating additional buffers will have substantial costs to farmers. Requiring farmers to take land out of production will reduce income to farmers already operating under very narrow margins, while increasing costs through the planting of vegetative buffers. Vegetative buffers can range from thirty feet in width, up to one hundred feet in width potentially making some farmers uncompetitive. Additionally, HB 2564 prohibits the application of any pesticide around a pilot school. With Hawaii's temperate climate that encourages pest growth, this type of ban would result in dramatic crop losses to farmers.

While impacting surrounding farmers, the bill does not allow farmer participation in the siting of pilot schools. Farmers would bear the cost impacts of removing arable acreage, prohibitions of needed crop protection tools, and cost of planting permanent additional buffer systems, without having any voice in the program. Any pilot school program should include not only the support of volunteer schools, but that of surrounding farmers who will bear the cost of this program.

HB 2564 is also problematic due to the lack of transparency. The bill fails to identify the parameters of, or clear process on how schools will be selected. But, more troubling is that the fact that the minimum buffers for farmers is not established in the bill and there are no clear guidelines, parameters or metrics for how these buffer zones will be set. The lack of quantifiable information from which to estimate the ultimate cost of this program makes it impossible for the Committee on Agriculture to accurately access the real costs to agriculture.

Finally, the lack of clearly identifiable standards for buffer zones creates constitutional "taking" problems under Hawaii's State Const. Art. I, Section 5 and United States Const. 5th Amendment and 14th Amendment. A "regulatory taking" occurs when government regulation limits the uses of private property to such a degree that the regulation effectively deprives the property owners of economically reasonable use or value of their property to such an extent that it deprives them of utility or value of that property, even though the regulation does not formally divest them of title to it. *Lucas v. South Carolina Coastal Council,* 505 U.S. 1003 (1992). Here, the pilot program would need to have a clearly identified "essential nexus" between the legitimate state interest and the burden being placed upon the property interest. *Nolan v. California Coastal Commission,* 483 U.S. 825 (1987). Based on the foregoing, we do not believe that state has adequately demonstrated that there is an essential nexus being accomplished furthering the public interest via a buffer zone, especially since the degree and distance has yet to be established.

Vegetative buffers are part of an Integrated Pest Management (IPM) system that can be beneficial to farmers. WPHA believes a better use of state resources would be to provide additional funding to University Extension agents and DOA to provide additional education and training to farmers on useful IPM systems. For these reasons WPHA **opposes** HB 2564 and asks the committee for a **no** vote. We thank you for your consideration of our comments.

Sincerely,

6.0.5

Renee Pinel President/CEO

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 1428 South King Street Honolulu, Hawaii 96814-2512 Phone: (808) 973-9600 FAX: (808) 973-9613

March 3, 2015

MEMORANDUM

- **TO:** Scott E. Enright Chairperson, Board of Agriculture
- **FROM:** Ken H. Kakesako Legislative Coordinator
- SUBJECT: Information Requested Regarding School Evacuations Due to Pesticide Drift

In response to inquiries made by Senator Gil Riviere through email on February 14, 2015, the following information was collated by the Pesticide Branch staff to address the question of the number of school evacuations that have occurred as a result of pesticide drift.

03-01-06	Waiau Elementary School: 6 children and 2 faculty members transported to hospital for observation. Homeowner applicator – Malathion product
04-13-06	Aina Haina Elementary School: 50 students taken to hospital for evaluation. Homeowner applicator – Malathion product
11-14-06	Waimea Canyon School: 14 students/teachers claimed to suffer from health effects. Eight were sent home. Fire and police and collections manager from the National Tropical Botanical Garden agreed the odor was from blooming stinkweed. Glyphosate was applied during the day. Swab samples did not show glyphosate or Aminomethyl phosphonic acid (AMPA) in samples.
05-04-07	Kahuku High & Intermediate Schools: 4 students and 1 teacher sicken. Commercial turf grass farm applicator – Orthene product
01-25-08	Waimea Canyon School odor complaint: Ten students went to the ER and six went directly home. A diesel odor was supposedly detected by the students. Syngenta representative confirmed that stinkweed was plowed under and remove by hand and there were no pesticide applications made to fields adjacent to WCS on 1-25-08.
02-16-08	St. Joseph School (Waipahu, Oahu). 29 students, 2 teachers sicken. School custodian applicator - Malathion product



03-06-08	Highlands Intermediate School: 17 students and staff member complained of reaction to pesticide odor. Homeowner applicator – Malathion product
09-28-10	Highlands Intermediate School (Pearl City, Oahu) Treated 15 students, 2 students hospitalized. Homeowner applicator – Malathion product
11-25-13	Kaimiloa and Pohakea Elementary School (Ewa Beach): $6-7$ students, 1 staff member sicken. Homeowner applicator applied Malathion like product. Product given to him by neighbor supposedly an herbicide in unmarked container.
12-04-13	Kamiloiki Elementary School (Hawaii Kai): School evacuated 450 students, staff and faculty. 2 students taken to hospital for observation nausea and dry cough. Homeowner applicator – Malathion product
12-18-13	Wilcox Elementary School / Boys & Girls Club (Kauai) a dozen students were dizzy and nauseous. : Homeowner applicator – Malathion product
03-13-14	Kamaaina Kids at Wilcox Elementary School (Kauai) (A+after-school program); Homeowner applicator – Malathion product
04-03-14	Kahaluu Elementary School: Mulch pile (There were some violations by the City & County of Honolulu, Parks & Recreation that were unrelated to the odor.)
09-18-14	Honokaa High & Intermediate School: Homeowner applicator (Malathion, Diazinon & volck oil
10-27-14	Kapolei Elementary: Homeowner applicator (Malathion used but no particle drift demonstrated)
12-17-14	Waiakea Intermediate School: Unable to determine source of odor; Hazmat responded and could not locate odor source.

Should you have any further questions or need for clarification, please feel free to contact Tom Matsuda, Pesticide Branch Manager, at 808-973-9402.

mailinglist@capitol.hawaii.gov
Saturday, February 06, 2016 5:02 PM
AGRtestimony
rangien2010@yahoo.com
Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

HB2564

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Puanani Rogers	Ho`okipa Network - Kauai and Aha Moku Kauai	Support	No

Comments: I strongly support this measure....HB2564. More studies and protective measures should legislated to discontinue and prevent any poisonous sprays to foul our lands!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 9:10 PM
То:	AGRtestimony
Cc:	nredfeather@kohalacenter.org
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

HB2564

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments: Protecting our children, their health, their ability to learn, and their future is one of the most important steps we can take, especially while they are away from their homes and at school.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



House Committee on Agriculture and House Committee on Energy and Environmental Protection

Hawai'i Center for Food Safety strongly supports: HB2564.

Dear Chair Tsuji, Vice Chair Onishi, Chair Lee, Vice Chair Lowen and Members of the Both Committees,

My name is Dr. Ashley Lukens and I am the Director of the Hawai'i Center for Food Safety (CFS). CFS is a nationwide public interest, sustainable agriculture nonprofit organization whose mission centers on furthering the public's right to know how their food is produced, through labeling and other means. We have over 750,000 farmer and consumer members across the country, including nearing 10,000 in Hawai'i. On behalf of CFS and our members, I thank you for the opportunity to speak to you today regarding this important bill.

CFS has been dedicated to addressing the human health and environmental impacts of our increased reliance on pesticide use in food production, both in the State of Hawai'i and nationally. We were instrumental in providing legal and communications support in the passage of numerous ordinances relating to pesticide use and disclosure, such as Kaua'i's Bill 2491. Since 2014, as the inaugural director here in Hawai'i, I have worked closely with community members across the state, in all counties, and have played an instrumental role in the passage of Maui's moratorium on GE production until companies submit environmental and public health impact assessments.

I am writing in strong support of HB2564, which aims to protect our keiki from the impacts of large-scale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State. Vegetative buffer zones not only act as a wind-break, but they will provide habitats for critical native species and crops, support soil remediation, and create an outdoor learning space to engage the broader community in agriculture and environmental stewardship.

There are at least 27 schools in Hawai'i located within a mile of fields where agrichemical companies like Monsanto and Dow Chemical spray restricted-use pesticides. Based on data released in the Waimea Canyon Class Action litigation, and our aggregation of the Kaua'i 'Good Neighbor Program', we know that these companies spray complex formations of restricted and general use pesticides, year round, multiple times a week, up to sixteen times a day'. The Kauai GNP data reports that between December 2013 and August 2015, a total application of 4,018.51 gallons and 2,389.86 pounds of concentrated Restricted Use Pesticides were sprayed on Kaua'i by the five participating companies (Syngenta, Pioneer (Dupont), Dow AgroSciences, BASF and Kaua'i Coffee). Although the locations where these pesticides were applied are not

NATIONAL HEADQUARTERS

660 Pennsylvania Avenue, SE, Suite 302 Washington, D.C. 20003 T: 202-547-9359 F: 202-547-9429

CALIFORNIA OFFICE

303 Sacramento Street, 2nd Floor San Francisco, CA 94111 T: 415-826-2770 F: 415-826-0507

PACIFIC NORTHWEST OFFICE 917 SW Oak Street, Suite 300 Portland, OR 97205

HAWAI'I OFFICE

1132 Bishop Street, Suite 2107 Honolulu. Hawaii 96813 T: 808-681-7688

T: 971-271-7372 F: 971-271-7374

reported by this program, we know that the frequency and quantity of use is sufficient to raise concerns about pesticide exposure.

Children can be exposed to pesticides applied on school grounds, pesticides that drift onto school grounds from neighboring agricultural lands, or from pesticide residues^{ii,iii}, **and it is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal**, ^{iv} **neonatal**, ^v **and infant life can disrupt critical developmental processes**^{vi}. Early life pesticide exposure has been linked to long-term health effects including cancer^{vii}, decreased cognitive function^{viii,ix,x}, behavior problems^{xi,xii}, birth defects and other adverse birth outcomes^{xiii}, and asthma^{xiv}. Specifically, according to a 2012 report by the American Academy of Pediatrics entitled "Pesticide Exposure in Children," children exposed to chronic, low-level exposure to restricted used pesticides are at a risk of neurodevelopmental disabilities like autism and ADHD^{xv,xvi,xvii,xviii}, leukemia^{xix,xx,xxi}, and asthma^{xxii,xxiii,xxiii}, xxiii,xxiv</sup>.

It is important here to note, that the medical literature, although demonstrating serious longterm impacts of acute exposure, actually emphasizes the risks posed by chronic low level exposure. I reiterate this because, in the process of discussing increasing our regulation of pesticides near schools, the industry and the Department of Agriculture have repeatedly emphasized that home users and not industrial users are responsible for drift incidents across our state. Certainly we are concerned about inappropriate home use of pesticides and would like the Department to have more man power to oversee and monitor all pesticide use. To this end we have supported the increase in staffing to the Department's Pesticide Branch. The level of pesticide exposure that we are concerned about, however, cannot be detected or reported, therefore it shows the gaps in our current regulatory regime. After analyzing the impacts of pesticide exposure on children's health, the American Academy of Pediatrics (AAP) recommended that states and counties implement buffer zones to mitigate these serious risks. As we learned last year when Dr. Ryan Shriver, a pediatric Neurologist at Shriners Hospital, testified in support of Buffer Zones, this is, in fact, the logic of pediatrics: to prevent exposure to risk, not to treat post-facto^{xxv}.

Indeed, the establishment of no-spray and vegetative buffer zones around sensitive areas like schools is not a radical regulatory concept. Rather, following on the pressure of organizations like the American Academy of Pediatrics, an increasing number of states and counties are adopting this policy.

We also take issue with the Department of Agriculture's understanding that 'the label is the law' and should be sufficient to protect our local communities and pesticide users. **Pesticide labels do not disclose the inert and often also toxic ingredients and combinations**^{xxvi}. The AAP explains that this poses problems for physicians to be able to treat patients who have potentially been exposed to pesticides, as they would need to call the manufacturer to gain information about toxicity of all chemicals, which often causes a delay in diagnosis and treatment^{xxvii}. **Not only does the label lack complete transparency, but it does not contain chronic toxicity information, only acute exposure.**

I will also note that despite the industry's claims that this bill "hurts farmers," this pilot program, which will be implemented around five schools, actually seeks to target <u>only high-</u><u>volume users of restricted use pesticides</u>. Like other environmental and industrial regulations, it focuses on the most toxic chemicals when used in the highest volumes because these are the primary sources of community concern. Creating bi-furcated regulations of this kind is increasingly important because while the threats posed by industrial agriculture are real and require increased regulation, a one-sized-fits-all approach can hurt smaller farmers. For example, in the area of food safety, the federal Food Safety Modernization Act has several regulations that pertain only to larger producers. Similarly, in the area of industrial animal production (CAFOs or Concentrated Animal Feeding Operations), certain permits and regulations for treating animal waste and water discharge are only triggered for the large producers that handle a certain number of animals.

The people of Hawai'i have the right to decide that the risks associated with the use of toxic pesticides in commercial agriculture are unacceptable, and take action to reduce and prevent the potential negative impacts of such use. Currently, there are no laws in Hawai'i regulating pesticide use in or around schools. This bill will not only protect our learning children from pesticide drift, but it will educate them on the negative effects of pesticide use, agrichemical companies, and cultivating healthy, native environments.

Thank you for this opportunity to provide testimony, and I am happy to provide further analysis or respond to any follow-up questions from the Committee.

Respectfully,

Ashley Lukens, PhD Director, Hawai'i Center for Food Safety

ⁱ Jervis G, Smith K (2013) Presentation by plaintiffs' attorneys in lawsuit by Waimea,

Kaua'i residents against Pioneer, DuPont. July 13, 2013. http://vimeo.com/70580803.

ⁱⁱ Alarcon WA et al. 2005. Acute illnesses associated with pesticide exposure at schools. Journal of the American Medical Association 294(4): 455-465.

^{III} Goldman P, Brimmer JK and Ruiz V. 2009. "Pesticides in the Air – Kids at Risk: Petition to EPA to protect children from pesticide drift," Earth Justice and Farmworker Justice, October 2009.

^v 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.

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

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

^{viii} 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.

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

^x 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.

^{xi} 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.

^{xii} 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.

xⁱⁱⁱ 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.

x^{iv} 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.

^{xv} Rauh VA, Garfinkel R, Perera FP, Andrews HF, Hoepner L, Barr DB, Whitehead R, Tang D, Whyatt R (2006) Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first 3 years of life among inner-city children. Pediatric 118(6): e1845-e1859. www. pediatrics. org/cgi/content/full/118/6/e1845.

^{xvi} Roberts EM, English PB, Grether JK, Windham GC, Somberg L, 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.

^{xvii} Eskenazi B, Marks AR, Bradman A, Harley K, Barr DB, Johnson C, Morga N, Jewell NP(2007) Organophosphate pesticide exposure and neurodevelopment in young Mexican-American children. Environmental Health Perspectives 115(5): 792–798.

^{xviii} Bouchard MF, Chevrier J, Harley KG, Kogut K, Vedar M, Calderon N, Trujilo C, Johnson C, Bradman A, Barr DB, Eskenazi B (2011) Prenatal exposure to organophosphate pesticides and IQ in 7-year-old children. Environmental Health Perspective 119(8): 1189–1195.

^{xix} Infante-Rivard C, Labuda D, Krajinovic M, Sinnett D (1999) Risk of childhood leukemia associated with exposure to pesticides and with gene polymorphisms. Epidemiology 10(5): 481-487.

^{xx} Roberts JR, Karr CJ (2012) Pesticide Exposure in Children. Council on Environmental Health. Pediatrics 130(6): e1757-e1763. http://pediatrics.aappublications.org/content/130/6/e1757.full.html.

^{xxi} Monge P, Wesseling C, Guardado J, Lundberg I, Ahlbom A, Cantor KP, Weiderpass E, Partanen T (2007) Parental occupational exposure to pesticides and the risk of childhood leukemia in Costa Rica. Scandinavian Journal Work Environmental Health 33(4): 293-303.

^{iv} 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.

^{xxii} Hoppin JA, Umbach DM, London SJ, Alavanja MCR, Sandler DP (2002) Chemical predictors of wheeze among farmer pesticide applicators in the Agricultural Health Study. American Journal of Respiratory and Critical Care Medicine 165: 683-689.

^{xxiii} 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. Environmental Health Perspective 112(6): 760–765.

^{xxiv} Strina A, Barreto ML, Cooper PH, Rodrigues LC (2014) Risk factors for non-atopic asthma/wheeze in children and adolescents: a systematic review. Emerging Themes in Epidemiology 11(5). http://www.eteonline.com/content/11/1/5.

^{xxv} Council on Environmental Health. (2012). Pesticide Exposure in Children: A Policy Statement. American Academy of Pediatrics. www.pediatrics.org/cgi/doi/10.1542/peds.2012-2757

^{xxvi} US Government Publishing Office. (February 4, 2016). Electronic Code Of Federal Regulations: Labeling Requirements for Pesticides and Devices. See 40 CFR 156.10(g). http://www.ecfr.gov/cgi-bin/text-

idx?SID=9626a4e9b043f6368b1430d953b09a7c&mc=true&node=se40.24.156_110&rgn=div8

^{xxvii} Roberts, J.R., Karr, C.J., and Council On Environmental Health. (December 2012). Pesticide Exposure in Children: Technical Report. PEDIATRICS. Vol. 130. www.pediatrics.org/cgi/doi/10.1542/peds.2012-2758



HCIA 2014 - 2016 Board of Directors

> **President** Kirby Kester

Vice-President Alan Takemoto

> Secretary Dawn Bicoy

Treasurer Keith Horton

Directors-at-Large

Blaise Boyle Adolf Helm Angus Kelly Steve Lupkes Richard McCormack Shay Sunderland Joshua Uyehara Laurie Yoshida

President Emeritus Mark Phillipson

Executive Director Bennette Misalucha

OUR MISSION

HCIA is a Hawaii-based non-profit organization that promotes modern agriculture 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 economy. In Strong Opposition to HB 2564 Relating to Vegetative Buffer Zone

HOUSE COMMITTEE ON AGRICULTURE HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION Tuesday, 02-09-16 8:30AM in House conference room 325.

Aloha Chair Tsuji, Chair Lee, Vice Chair Onishi, Vice Chair Lowen and Members of the Committees,

My name is Bennette Misalucha, Executive Director of the Hawaii Crop Improvement Association (HCIA). HCIA is a Hawaii-based non-profit organization promoting agricultural 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 is in **strong opposition** to HB 2564 which imposes restrictions on farmers who are within an undefined proximity to not-yet identified pilot schools. This bill assigns arbitrary restrictions and conditions that go far beyond science-based regulations. The EPA already evaluates and registers pesticides to ensure that they will not harm people, non-target species, or the environment. When EPA's scientific evaluation determines that buffers, including vegetative buffers, are necessary to provide additional protections to sensitive populations, that requirement is imposed by the label and enforced.

Moreover, this proposed measure is not justifiable as it ignores the fact that there have been zero incidences of agricultural drift to schools in Hawaii, as reported by a recent joint finding by the Department of Agriculture. Any new and draconian requirement, especially one that requires valuable farmland to be taken out of production, must be warranted and applied equitably to **all** pesticide users, rather than agricultural users only.

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, particularly our *keiki*, are our utmost concern. 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 the laws.

Although presumably targeted to affect seed companies, HB 2564 will impact other farmers in the state at a time when local agriculture is already besieged by other challenges. For example, farmers will need to bear the substantial cost of growing and maintaining plants in random buffer areas, thereby reducing their potential income.

Since a vegetative buffer is one of the strategies of Integrated Pest Management (IPM), a better use of state resources would be funding additional IPM system education and training for farmers.

HCIA appreciates the good intentions to safeguard the welfare of school children. We have the same mission in caring for the community and we will continue to work with the Department of Agriculture to ensure that goal is accomplished.

Bennette Misalucha Executive Director, Hawaii Crop Improvement Association



P.O. Box 253, Kunia, Hawai'i 96759 Phone: (808) 848-2074; Fax: (808) 848-1921 e-mail info@hfbf.org; www.hfbf.org

February 9, 2016

HEARING BEFORE THE HOUSE COMMITTEES ON AGRICULTURE and ENERGY AND ENVIRONMENTAL PROTECTION TESTIMONY ON HB 2564 RELATING TO THE ENVIRONMENT Room 325 8:30 AM

Aloha Chairs Tsuji and Lee, Vice Chairs Onishi and Lowen, and Members of the Committees:

I am Randy Cabral, President of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,900 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.

HFB strongly opposes HB 2564,

HB 2564 imposes additional burdens on our local farmers that will damage their viability and thwart our State goal of self-sufficiency and sustainability, while providing no additional safety for our communities.

Furthermore, the bill should not pass these committees because it is based on erroneous premises that will result in unjustifiable, arbitrary, and possibly unconstitutional new restrictions and requirements for our struggling farming community.

Contrary to the statements made in the bill:

- The number of large-scale, outdoor commercial agricultural operations in Hawaii is in fact, DECREASING, at a time when our State's objective is to foster more commercial farming in order to accomplish agricultural sustainability.
- Farmers use pesticides only when necessary; the application of a pesticide is dependent upon pest and disease outbreaks that cannot be controlled without them, not whether the farm is large or small, biotech, organic, or conventional.
- Even a small vegetable farm may need to use over the bill's threshold amount of restricted use pesticides during any given year, if a surge in pests that cannot be controlled by any other means would otherwise destroy the crop.
- The U.S. EPA strictly regulates all pesticides, especially restricted use pesticides, and does not allow any pesticide to be marketed or used unless it deems that the product can be used safely and without unreasonable adverse effects on the environment.

- The State's regulating agency, the Department of Agriculture, has staff and procedures to enforce pesticide laws and regulations so that the community is not impacted by improper pesticide use. Pesticide complaints are promptly investigated and evaluated by trained and experienced pesticide experts at the Department. Additionally, the State Department of Health works collaboratively with DOA to follow up on claims of exposure or illness.
- Environmental monitoring of air, surface water, drinking water, and sediment in Hawaii indicates no threat to people or wildlife from agricultural pesticides.
- A DOA analysis of impact to Hawaii schools from pesticides over the last nine years clearly demonstrates that farmers' use of pesticides was NOT the cause.
- Farmers are not the major users of restricted use pesticides in Hawaii; in fact, far more restricted use pesticides are put directly into public drinking water and sprayed purposely into people's homes than applied on farms.
- The bill is inequitable because it **exempts everyone** who applies restricted use pesticides, those who spray indoors and outdoors--- **except farmers**--- this bill unfairly singles out farmers.
- If the goal of this bill is truly to protect children from pesticide exposure, this legislative body should consider mandating a strict Integrated Pest Management program for all school properties. Pesticides would then not be used in the classrooms or playgrounds except as a last resort. The current bill allows pesticides to be used by the school staff itself, or contractors, directly into the children's classrooms and play areas.
- The U.S. EPA continually evaluates agricultural use of pesticides and updates its regulations based on scientifically valid evidence.
- Farmers support community awareness and participation in the regulatory process, along with swift and appropriate enforcement by government agency experts, trained and educated on the complex federal and State pesticide regulations. We are opposed to citizens' lawsuit provisions. Citizen suits are counter-productive to community cohesion, pitting neighbor against neighbor, and are extremely costly, monetarily and emotionally. They often result in settlements that benefit no one except the attorneys.

Arbitrary, drastic, and costly measures burdening a specifically targeted entity are never justifiable. This bill mandates that an as-yet undetermined, chosen farm or ranch that uses an as-yet undetermined amount of restricted use pesticides, must stop all uses of *any* pesticides in an as-yet undetermined area of the farm. In addition, the farmer, to his detriment and at his own cost, must take his land out of production to plant and maintain a "buffer" area (with the plant species prescribed by the government) which he cannot use any pesticides upon, regardless of circumstances. *Meanwhile, the school grounds themselves are under no requirement to be pesticide-free, and in fact, groundskeepers, teachers, and termite treatment applicators could expose the school children to far more risk of pesticide exposure than the farm.*

HFB sincerely believes that the misinformation generated by mainland extreme activists has created an unwarranted atmosphere of fear and misunderstanding of Hawaii's farmers. We are concerned that, along with other pressures that make farming here extremely challenging, further unjustifiable restrictions on farming will be the demise of commercial agriculture in Hawaii, and with that, the end of any hope for self-sufficiency.

We hope you will take our concerns into consideration as you deliberate on this bill. Thank you very much for your support of Hawaii's farmers and ranchers.

MONSANTO CO. 94-520 KUNIA ROAD KUNIA, HAWAII 96759

TESTIMONY BEFORE THE HOUSE COMMITTEE ON AGRICULTURE and HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

FEBRUARY 9, 2016

TESTIMONY ON HB 2564 RELATING TO ENVIRONMENTAL PROTECTION

Chair Tsuji, Chair Lee 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 HB 2564.

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 at the right rate at the right time.

Good public policy must be based on facts. We encourage the committee to examine the basic facts on pesticide use in Hawaii to assess what actual risks these uses might present to the population and the environment. The Hawaii State Department of Agriculture has the data on purchases of Restricted Use Pesticides (RUPs). Any legislation on buffer zones has to start with the actual facts and figures that define what sectors employ RUPs and how much they use. In 2013 for example, 1.3 million pounds of RUPs were purchased and the Agriculture sector accounted for less than 1/3 of these RUP purchases. The seed industry is the largest sector in Agriculture. Monsanto is the largest seed company and owns or leases about 8,500 acres and we use less than 1% of the total RUPs sold in Hawaii. It is ironic that this pilot program only applies to farmers who make up only 32% of RUP Sales when the larger majority of the RUP uses are exempt. (Hawaii Department of Agriculture 2013 RUP Sales Data).

Another important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation. The majority of the incidents were due to the use of pesticides by homeowners.

We strongly oppose HB2564 Thank you

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 7:17 AM
То:	AGRtestimony
Cc:	aipohaku@hotmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

HB2564

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Vince Kana`i Dodge	`Ai Pohaku	Support	No

Comments: Aloha Legislators, We at `Ai Pohaku- The Stone Eaters support HB2564 with full pesticide and herbicide spraying disclosures. We must protect the well-being of our keiki and our `aina. aloha nui!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



February 7, 2016

Rep. Chris Lee, Chair House Committee on Energy & Environmental Protection Rep. Clift Tsuji, Chair House Committee on Agriculture State Capitol, Conference Room 325 415 South Beretania Street Honolulu, Hawaii 96813

RE: SUPPORT - HB 2564 - vegetative buffer zones around schools

Dear Chair Lee, Chair Tsuji, and Committee Members,

On behalf of Pesticide Action Network North America, and our members in Hawai'i, we wish to support HB 2564 and any efforts to provide vegetative buffer zones around schools, that both encourage native planting and reduce the risk of potential pesticide drift. 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 encourage solutions to the problems posed by testing from genetically engineered seed testing fields – rebuilding and regenerating ecosystems and soil – and protect children from volatile & highly hazardous pesticides.

Children today are sicker than they were a decade ago, confronting challenges their grandparents were unlike to face. Public health experts warn us of a "silent epidemic" of learning disabilities and disorders, a 17% increase in just the past fifteen years. And a growing body of scientific evidence points to pesticides – even in very small amounts – as a significant contributor to impacts on children's health and intelligence. Quickly growing bodies take in more of everything. Relative to their size, kids eat, breathe and drink much more than adults and this can also mean pesticides.

The sixth edition of the US EPA's manual, *Recognition and Management of Pesticide Poisoning* links pesticides exposure to a number of permanent health effects in children. And its December 2012 policy statement "Pesticide Exposure in Children," the American Academy of Pediatrics similarly noted that prenatal and early childhood exposure to pesticides is associated with pediatric cancers, decreased cognitive function and behavioral problems.

Many pesticides, including those already used on Hawai'i, are increasingly linked to cancers, hormone disruption, asthma and developmental delays. These include pesticides like paraquat, atrazine, chlorpyrifos. And the pesticide chlorpyrifos exemplifies these concerns. Independent research from several institutions, including University of California - Berkeley and Columbia University, found that exposure can significantly affect a developing child's brain architecture.

Reclaiming the future of food and farming

Children are exposed to pesticides where they live, learn and play. Pesticides regularly end up in water through runoff and percolate through groundwater, end up as residue on food or can be tracked in on parents' clothes, can be carried on dust or drift through the air – and remain there – sometimes many days after the initial application. The Environmental Protection Agency admits as much (1996): "…we recognize that some degree of drift of spray particles will occur from nearly all applications."

It's no surprise then that hazardous pesticides are being found in close proximity to the state's children. And in some cases have directly led to hospital visits. Chlorpyrifos (product name: Lorsban) has been detected in the air near schools, including monitors operated by the University of Hawaii.

Given use and proximity to schools, the legislature should test out new approaches to find shared solutions to pesticide drift and also find ways to support the biodiversity and culture of the islands. Developing vegetative buffers between schools and points of application as a pilot project on five sites is a good place to start.

Research conducted by the University of California – Davis MIND Institute and University of California – Berkeley CHAMACOS study indicate that buffer zones of more than ¹/₄ mile should be created to ensure greater protection for children, from both pesticide volatilization and pesticide-dust contamination.

Many states across the country already create some additional sort of buffer distance between schools and points of application. In California, for example, the state Department of Pesticide Regulation and many county agricultural commissioners have created more significant buffers around schools, in some cases up to one mile.

As the legislature moves forward, it should consider buffer zones of at least one mile around schools, and use these as places to promote healthy agroecological systems and regenerative agriculture.

We have an opportunity to recognize the unacceptable risk facing our *keiki* and identify the opportunity to continue to support prosperous ecosystems and farming in Hawai'i. By passing this bill we can help provide necessary information to create a lasting legacy of health across the islands.

I respectfully ask for your support of HB 2564. And please feel free to contact me with any questions at <u>ptowers@panna.org</u> or (808) 206-8868.

Sincerely,

Paul Towers Organizing & Media Director



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

In opposition to HB 2564 – Relating to Agriculture

Tuesday, Feb. 9, 8:30 am – House Committees on Agriculture and Energy and Environmental Protection

Aloha Chairs Tsuji and Lee 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 HB 2564.

This legislation is based on the false premise that the pesticide products applied by farmers are being used in a manner that threatens public health and the environment. These products are highly regulated by the United States Environmental Protection Agency (EPA). The likelihood of their exposure to sensitive populations and the environment are carefully considered during the approval and reregistration process. Those who apply pesticides are careful to follow the product labels and have an interest and a responsibility to keep their land safe and those who are close to the land healthy for use both today and in the future.

There has been much discussion around Restricted Use Pesticides (RUPs). RUP's are tools that are used to protect their land from weeds and pests and are part of important Integrated Pest Management (IPM) strategies embraced by the agricultural community. RUPs are restricted in that they may only be applied by or under the supervision of a trained and certified applicator and are not available to the general public. Most of the restricted use pesticides used in Hawaii are used in urban settings for structural pest control around homes and to treat public water supplies. These products are applied by trained professionals just as those who apply RUP's on agricultural crops. These specially trained applicators are required to follow certain special rules, such as applying only during certain times or at certain locations or leaving untreated buffer areas. That doesn't mean RUPs are necessarily more toxic than other pesticides, many times they just require more precision in their application.

Based on our work in many states and knowledge of state laws, there are many things in this legislation that would be precedent setting. It unfairly targets one sector of the agriculture community by placing numerous requirements on them that lack any justification. In addition, the citizen lawsuit provision does nothing to increase public and environmental safety.

A strong state pesticide regulatory program is essential to assuring the public that valuable pesticide products are used properly. We believe that the legislature has an opportunity to provide that support to the Hawaii State Department of Agriculture through HB 504 which provides them with the funding to strengthen their capacity to regulate pesticides in the state. If lawmakers are sincere about addressing public safety, support the pesticide branch of the Dept. of Agriculture through HB 504.

Our industry recognizes that there are public concerns, many of which are put forward by activist groups and allies who are interested in destroying one sector of the agriculture industry. We share any valid concerns and have a strong desire to work with elected officials and state agencies in refining many of the voluntary measures that are already in place, designed to provide an extra layer of protection to sensitive populations and the environment. HB 2564 is extreme in its approach and will not provide any additional protection than the voluntary measures already in place.

Mahalo for your consideration.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 8:59 AM
То:	AGRtestimony
Cc:	lho@hawaiipublicpolicy.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

HB2564

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Adolph Helm	Dow AgroScience	Oppose	No

Comments: On behalf of the Dow AgroSciences seed farm operations in Hawaii, I would like to express our opposition to HB 2564. Dow AgroSciences uses pest control technologies in an Integrated Pest Management program, which means we make decisions that use the right pest control tool for the job in a manner that minimizes risk from those uses. We are committed to the stewardship of pest control products and the protection of the environment, our workers and our community. The specific conditions of use of a pesticide product are subject to the legal requirements of that product label, including science-based restrictions developed under the authority of the USEPA (U.S. Environmental Protection Agency) and the Hawaii Department of Agriculture. Extensive data is required by the USEPA to develop product specific restrictions to protect human health and the environment from both short term and long term potential exposures to pesticides. HB 2564 establishes a pilot program for vegetative buffer zones related to 5 individual schools. The distance of a school from a "commercial agricultural production" area" is not specified. The level of pesticide use that qualifies for a pilot program is unspecified. It is unclear where the potential requirements of this bill are relevant. HB 2564 applies to restricted use pesticides. These pesticides are specifically categorized as such by the USEPA and necessary additional restrictions are added to the specific product labels with the force of law, including science-based decisions on buffer zones. Vegetative strips and wind breaks can be an effective stewardship component in some circumstances, but are not a one size fits all component that should be mandated arbitrarily. In addition to being potentially unnecessary, arbitrary requirements can create a false perception that there are protections offered that are not really there, undermining a fact-based system.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 12:18 PM
То:	AGRtestimony
Cc:	walkerkauai@hawaiiantel.net
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

<u>HB2564</u>

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Bill Walker	Individual	Comments Only	No

Comments: It is my desire that our state legislators not be influenced by the big money being thrown around by the mega-seed companies and that the state protect the population's health by mandating disclosure of the use of toxic chemicals around populated areas. I would also urge the attorney general investigate these companies for possible RICO violations.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 1:31 PM
То:	AGRtestimony
Cc:	begoniabarry@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

<u>HB2564</u>

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Barbara Barry	Individual	Comments Only	No

Comments: Aloha, Please do not attach HB 849 onto HB 2564. These bills are not compatible. The "Right to Farm" bill should be called the "Right to Poison"Bill cause it will give these Chemical Companies who call what they do "Farming", the right to continue to poison the People, 'Aina and Waters. You must do what is pono and hear the Pesticide Disclosure Bill and the "Right to Farm" bill separately. These two bills are not compatible on any level. How dare you try to pull a fast one on the people who live and raise their families here. Any lawmaker who has investments with the BioChemical Corporations or have ever taken any gifts, meals or political contributions must recuse themselves from voting in favor of the "Right to Farm (Poison)" Bill. Our lawmakers work for the people, not the Multinational Chemical Corporations who care nothing about the communities they poison. No amount of donations make up for the poisoning they inflict on these sacred islands each and every day.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 4:38 PM
То:	AGRtestimony
Cc:	essential@hawaii.rr.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

HB2564

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Barry Sultanoff	Individual	Comments Only	No

Comments: I am a licensed physician (MD) in Hawaii, very concerned about the impact of pesticides upon the health of our keiki. I support the position of The American Academy of Pediatrics that buffer zones must be maintained around schools and other sensitive areas. Hawaii has become a major center for the testing of GE crops, in which dangerous pesticides having highly-suspect negative effects on human health are widely employed. I am strongly in favor of this bill, as a step in the right direction. We must employ the "precautionary principle" here for the sake of the next generation, as well as ourselves. We must act now to prevent these often-irreversible effects that these pesticides create, upon the health and well- being of all. the health of our land, as well as the people who inhabit it.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.
From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 9:55 AM
То:	AGRtestimony
Cc:	burgharc@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments: Why am I thinking that someone has figured out that near our schools we have chemicals being sprayed on lands that are harming our keiki? If that is the purpose of this bill then please protect. ALSO question why we are allowing chemicals that cause cancer and birth defects any where on our islands.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 5:21 AM
То:	AGRtestimony
Cc:	boilerm03@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments: I believe that the people of Maui County has come together to Protect the people and the land from any damage to our health and future use for the Aina. Peoples health has been affected as you reported in many cases around the county of Maui. We ask that you consider the effects on the people and the land and protection for the future generation. Mahalo

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 12:43 PM
То:	AGRtestimony
Cc:	taragrace808@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Tara Grace	Individual	Comments Only	No

Comments: • The issue of pesticides and genetically engineered (GE) seed experimentation is extremely important to our islands, so we are actively organizing to protect the health and safety of our community. • The number of commercial agricultural operations in Hawaii has been increasing rapidly. Children, the elderly, and other sensitive residents have no choice but to live, work, and commute daily in close proximity to areas where restricted use pesticides are being sprayed. Of greatest concern are restricted use pesticides such as chlorpyrifos, which scientists have definitively linked to developmental delays in children. Exposure to other toxic pesticides during fetal, neonatal, and infant life may also disrupt critical development processes. WHAT THE BILLS DO SB2475 - Buffer Zones Around Sensitive Areas • Aims to protect the state's environment and its residents from the unintended impacts of large-scale pesticide use by establishing buffer zones around sensitive areas including schools and childcare facilities. • Any commercial agricultural entity that purchases or uses an excess of restricted use pesticides annually shall restrict the outdoor application of all pesticides, including restricted use, general use, and experimental use pesticides within a designated distance of any sensitive area, surface water, watershed, or shoreline. HB2564/ SB2742 - Vegetative Buffer Zone Pilot Program • Aims to protect our keiki from the impacts of large-scale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the state. WHY THESE BILLS ARE GOOD • Buffer zones are a common sense solution for communities who are increasingly concerned about pesticide drift from large agricultural operations in their community. We can and should mitigate any risks these operations post to the future generations of Hawai'i. • The Vegetative Buffer Zone Pilot promotes the growing of native and/or beneficial plant species and vegetation while providing potential opportunities for remediation and filtering to improve air, water, and soil quality. • Pesticide drift happens frequently, particularly in Hawaii due to the common windy and warm conditions of the islands 1.2 • Due to Hawai'i's small size, it has a much higher density of field tests than other states. As a result, more people in Hawai'i live in closer proximity to field test sites than residents of any other state and run a higher risk of experiencing pesticide drift. PESTICIDE EXPOSURE RAISES SERIOUS HEALTH CONCERNS • According to the Kauai Good Neighbor Program, in the last 13 months

1,975lbs of the powerful insecticide, Chlorpyrifos has been used on Kauai.3 Chlorpyrifos has been linked to lung cancer,4 colorectal cancer,5 and non-Hodgkin's lymphoma.6 • The American Academy of Pediatrics has linked early life pesticide exposure to longterm health effects including cancer,7 decreased cognitive function,8,9,10 behavior problems, 11, 12 birth defects and other adverse birth outcomes, 13, 14 and asthma. 15 • The American Academy of Pediatrics recommends no-spray zones around schools to ensure the healthy development of our children. • At least 27 schools in Hawaii16 are located within a mile of large agricultural companies that spray restricted-use pesticides. Many residents, including children, have complained about sickness they attribute to pesticide drift.17,18,19,20 • Evidence from other states also suggests that pesticide drift is a frequent occurrence. A study of pesticide exposure at schools in eight states from 1998 to 2002 identified 2,593 individuals who had experienced acute pesticide-related illnesses. Of the 406 cases for which more detailed information was available, nearly one third (31%) involved pesticide drift from farmland while the others involved pesticide use at the school.21 MORE ABOUT THE SEED INDUSTRY & PESTICIDES • Since 1987 Hawai'i has hosted more cumulative GE field trials (3,243) than any other state. In 2014, 178 different GE field tests were conducted on over 1,141 sites in Hawai'i (vs. only 172 sites in California).22 • Herbicide-resistance was the most frequently tested trait in GE crop field tests in Hawai'i over the past five years. This means that plants genetically engineered in Hawai'i, by and large, are engineered to resist ever greater application of herbicides. The Kaua'i Agricultural Good Neighbor Program data reports a total application of 4,018.51 gallons and 2,389.86 pounds of concentrated Restricted Use Pesticides (RUPs) between December 2013 and August 2015, by the five companies that participate in the voluntary program (i.e. Syngenta, Pioneer (Dupont), Dow AgroSciences, BASF and Kaua'i Coffee). 23 REGULATION • Large-scale commercial agricultural operations in Hawai'i are NOT REQUIRED to observe buffer zones around schools, hospitals or other sensitive areas, NOR to disclose any of their spraying activities. • As of 2014, at least nine states had established no-spray buffer zones around sensitive areas such as schools, hospitals and public parks, and while eleven states have established notification requirements for pesticide applications near schools. These policy actions evince growing awareness of the serious health threats posed by pesticide drift. • We would all like to believe that the EPA protects us from pesticide harms, but that is often not the case. There are numerous examples of EPAapproved pesticides that medical scientists have found to be hazardous, several of which are banned in other nations. Additionally, existing federal oversight of pesticide exposure does not take into account chronic exposure to local pesticide use. Read our Pesticides in Paradise: Hawai'i's Health and Environment at Risk report for more information: http://www.centerforfoodsafety.org/reports/3901/pesticidesin- paradisehawaiis-health-and-environment-at-risk References: 1 AAPCO (2002). Letter from Donnie Dippel, President of AAPCO, to Jay Ellenberger of EPA, March 25, 2002. 2 AAPCO (1999, 2005). "1999 and 2005 Pesticide Drift Enforcement Surveys," Association of American Pesticide Control Officials, 2005. http://www.aapco.org/documents/surveys/drift99.html and http://www.aapco.org/documents/surveys/DriftEnforce05Rpt.html. 3 See https://data.hawaii.gov/Health/Kaua-i-Agricultural-Good-Neighbor-Program-RUP-Use-/9pud-c8q5 last visited 2/12/15 4 Lee, W.J. Blair, A. Hoppin, J.A. Lubin, J.H. Rusiecki,

J.A. Sandler, D.P. Dosemeci, M. & M. C. Alavanja. (2004). "Cancer incidence among pesticide applicators exposed to chlorpyrifos in the Agricultural Health Study." Journal of the National Cancer Institute, 96(23): 1781-9. 5 Lee, W.J. Sandler, D.P. Blair, A. Samanic, C. Cross, A.J. & M.C Alavanja. (2007). "Pesticide use and colorectal cancer risk in the Agricultural Health Study." International Journal of Cancer, 121(2): 339-46. 6 Schinasi, L. & M.E. Leon. (2014). "Non-Hodgkin lymphoma and occupational exposure to agricultural pesticide chemical groups and active ingredients: a systematic review and meta-analysis." International Journal of Environmental Public Health, 11: 4449-4527. 7 Infante-Rivard C, Labuda D, Krajinovic M, Sinnett D. 1999. Risk of childhood leukemia associated with exposure to pesticides and with gene polymorphisms. Epidemiology 10(5): 481-487. 8 Rauh V, Arunajadai S, Horton M, et al. 2011. Sevenyear neurodevelopmental scores and prenatal exposure to chlorpyrifos, a common agricultural pesticide. Environ Health Perspect. 119(8): 1196-1201. 9 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. 10 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. 11 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. 12 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. 13 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. 14 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. 15 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. 16 See http://www.protectourkeiki.org/takeaction/ last visited 2/12/15 17 Hillyer, B. (2008). "Lawmakers concerned about pesticide spraying." Hawai'i News Now, February 5, 2008.

http://www.hawaiinewsnow.com/story/7822628/lawmakers-concerned-about-pesticidespraying. 18Kalani N. & L. Fujimori. (2014). "Dozens of Kahaluu students sickened by fumes at campus." Honolulu Star-Advertiser, April 4, 2014.

http://www.staradvertiser.com/s?action=login&f=y&id=253867411&id=253867411. 19 Leone, D. (2008). "Odor that got kids sick debated." Honolulu Advertiser, February 24, 2008. Available at:

http://the.honoluluadvertiser.com/article/2008/Feb/24/In/hawaii802240350.html 20 Alarcon, W.A. et al. (2005). "Acute illnesses associated with pesticide exposure at schools." Journal of the American Medical Association, 294(4): 455-465. 21 Alarcon, op. cit., p. 2 22 ISB Locations (2015) Information Systems for Biotechnology. Downloaded 2/14/15 See chart at: http://www.isb.vt.edu/release-summary-data.aspx. 23 HDOA (2015) Kaua'i Good Neighbor Program, Hawai'i Department of Agriculture. Database. Last viewed 2/17/15 at: http://hdoa.hawaii.gov/pi/good-neighbor-data/

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 2:45 AM
То:	AGRtestimony
Cc:	tane_1@msn.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
David M.K. Inciong, II	Individual		No

Comments: I have read up on some incidents of this nature in different parts of the world. If you feel you need to do this; it should prove that GMO has no place in Hawaii as I have testified against it in the past. One cannot control the wind when these toxins become airborne. The effects have been devastating and the children ae the most vulnerable to its effects. Make sure this pilot program does not exasperate the situation; it will be on your heads when the predictable outcome is as we already know. I urge you to consider banning GMO from Hawaii Nei.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 10:58 AM
То:	AGRtestimony
Cc:	maria.makaleha@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Maria Walker	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 12:16 PM
То:	AGRtestimony
Cc:	bgreenleaf.maui@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
William Greenleaf	Individual	Support	No

Comments: I am writing in support of this bill. As a Farmer and as a Father/Grandfather...I support safety for the children first. Industry will argue that pesticides are regulated and they follow regulations. I will argue that humans make mistakes and children are the most vulnerable to poison. A Buffer zone is the necessary for the protection of the children who are attending school. School is meant to be a sanctuary, a safe place for learning. If any amendments are added, I propose that the kids should all be tested for accumulations of the chemicals sprayed, in the past 6 months, on the lands adjacent to their school.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 12:03 PM
То:	AGRtestimony
Cc:	megan@hempeymeyers.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
megan deets	Individual	Support	No

Comments: TESTIMONY IN STRONG SUPPORT OF HB2564 I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of large-scale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State. I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure. It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma. Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time. Thank you kindly for considering my testimony in strong support of the measure.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 12:50 PM
То:	AGRtestimony
Cc:	equality4peace@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Betty C. Dudney	Individual	Support	No

Comments: To be clear, we are for bill 2564, but without the "Right to farm" amendment..... Thank You, Golden Rule Family.org Co-founder, Betty Carol Dudney

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, February 05, 2016 8:02 PM
То:	AGRtestimony
Cc:	rittew@hotmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/5/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Walter Ritte	Individual	Support	No

Comments: I am in strong support. GMO fields are across the street of Kualapu'u Elementary School, up the road of our only high school and surrounds the Molokai Irrigation System, which holds the drinking water of Maunaloa town and Kaluako'i residential developments. Many of our people are in harms way from these GMO fields. Walter Ritte

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 8:14 AM
То:	AGRtestimony
Cc:	honokohau2@yahoo.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Kimberly Evans	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

AGRtestimony

From: Sent: To: Subject: Dennis O'Shea <oshea606@gmail.com> Sunday, February 07, 2016 10:40 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

Stop putting Monsanto & Dow's profits before your constituents health.

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Dennis O'Shea P.O. Box 11107 Lahaina, HI 96761

AGRtestimony

From: Sent: To: Subject: Misha Kassel <Mkassel137@yahoo.com> Sunday, February 07, 2016 6:35 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

Hello my name is Misha Kassel, I'm a local emergency medicine physician, an organic gardener by hobby. The more I have researched gmo's and pesticicdes the scarier they are for human nad environmental health. I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of large-scale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Misha Kassel 2428 Sonoma st Honolulu, HI 96822

AGRtestimony

From:Mary Mulhall <mmulhall@hawaii.rr.com>Sent:Saturday, February 06, 2016 11:20 AMTo:AGRtestimonySubject:In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

Please support HB 2564.

Vegetative buffer zones around schools across the State just makes sense!

here on Kauai, glycophosphates have now been found in honey on Kauai.

Pesticides are insidious. The effects on our children are sometimes massive, such as obvious birth defects, and sometimes subtle and difficult to trace.

Please support HB 2564 and protect our keiki. Mahalo!

Mary Mulhall 1210 Crossley Rd. Kapaa, HI 96746

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 8:10 AM
То:	AGRtestimony
Cc:	lkaapuni@hawaii.rr.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Linda Kaapuni	Individual	Support	No

Comments: I'm submitting written comments in support of HB2564. This bill will require large-scale commercial users of restricted-use pesticides to observe no-spray buffer zones for all pesticides around schools selected for the pilot program. I strongly urge committee members to support HB2564 as an important first step toward protecting the health and safety of Hawaii's children from toxic pesticide exposure. Mahalo nui!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 7:09 AM
То:	AGRtestimony
Cc:	hokuokekai 50@msn.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 7:08 AM
То:	AGRtestimony
Cc:	clareloprinzi@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
clare loprinzi	Individual	Support	No

Comments: Definitely pass this bill, it is essential to pass a bill like this for every keiki...stop poisoning our playgrounds, our schools and our keiki. NOW.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 10:10 PM
То:	AGRtestimony
Cc:	jpappas60@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Pappas	Individual	Support	No

Comments: I am in favor of "positive" buffer zones to protect sensitive areas such as schools, hospitals and parks from pesticide drift. Please consider this alternative.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 9:34 PM
То:	AGRtestimony
Cc:	terez.amato@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments: Aloha Chairs, Vice Chairs, and Committee Members, I am testifying to urge to you please pass this legislation, HB2564 pertaining to buffer zones around our schools. It is imperative that we take all precautions necessary to protect our children. This legislation simply makes sense. An Aye vote is a vote for our children's health and safety. Thank you! Terez Amato Kihei

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 9:17 PM
То:	AGRtestimony
Cc:	tbohl8@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Individual	Support	No

Comments: The public should have access to information on pesticide use that could affect their health.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 9:04 PM
То:	AGRtestimony
Cc:	judylotusheart@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Judith E. Levy	Individual	Support	No

Comments: Please be sensible and pass this crucial HB2564. We must continue our NEW VIGILANCE to PROTECT our precious soil and water and air for our health and the future of our children. YES plant buffer zones of native plants which will do the work of CLEAN UP!! WE ARE WATCHING YOU!!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 9:00 PM
То:	AGRtestimony
Cc:	legechair@gmail.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 8:14 PM
То:	AGRtestimony
Cc:	andrea@malamakauai.org
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Brower	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

Aloha mai,

My name is Peter Kalawaia Moore. I am testifying in support of HB 2564 to creat a NAtiev Hawaiian plant buffer zone around our schools to protect our keiki from suffering any potential risks from pesticide spraying. Please support this bill and find a way to protect our kids.

Mahalo, Peter Kalawaia Moore

1991 10th Avenue Honolulu HI 96816 (808) 778-3808

From:	mailinglist@capitol.hawaii.gov			
Sent:	Sunday, February 07, 2016 5:44 PM			
То:	AGRtestimony			
Cc:	bob-marion@hawaiiantel.net			
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM			

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Marion McHenry	Individual	Support	No

Comments: This is a common sense solution to protect our population from pesticide and herbicide drift. This would be an excellent program to adopt please pass this bill!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov			
Sent:	Sunday, February 07, 2016 5:38 PM			
То:	AGRtestimony			
Cc:	akamaimom@gmail.com			
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM			

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Felicia Cowden	Individual	Support	No

Comments: We need to ensure the health and safety of our communities. Perennial plants in the buffer zones should help diminish the intensity of the pesticides from the fields. It is a step of improvement.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov			
Sent:	Sunday, February 07, 2016 2:26 PM			
То:	AGRtestimony			
Cc:	alangorg@hotmail.com			
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM			

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments: We live in Lower Kula and teach in Pukalani and in Kahului and experience Roundup and other poisons spread over almost everywhere.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

TESTIMONY IN SUPPORT OF HB2564 Hawaii State House

Tuesday, February 9, 2016 House Conference Room 325 at 8:30a Submitted by Lynn B. Wilson, PhD

Chair Tsuji, Vice Chair Onishi & Members of the House Committee on Agriculture

Chair Lee, Vice Chair Lowen & Members of the House Committee on Energy & Environmental Protection

Dear Representatives:

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 urge you to <u>support</u> **HB2564: Relating to Agriculture** introduced by Representatives Lee, Cullen, Lopresti, and Thielen.

This proposed law aims to establish a pilot program by creating positive, regenerative, no spray zones to better protect our keiki from pesticides that are applied near schools and other sensitive areas by large-scale, outdoors, commercial agricultural operations across the state.

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 Pediatrics¹ and the American Congress of Obstetricians and Gynecologists.²

In Hawai`i, it is particularly large chemical companies that 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, jeopardizing the health of pregnant women and young children as well as long-term health outcomes for Hawai`i residents and for the environment itself. In "test fields" producing primarily inefficient biofuel and feed for livestock factories, these companies conduct "experiments," but not just on their seeds and the various, multiple pesticides they use in seed development. These outdoor laboratories are also experimenting on the people and the islands of Hawai`i.

- **NEW EPIDEMICS IN CHILDREN:** James Perrin, MD, FAAP, the immediate Past President of the American Academy of Pediatrics, has researched what he calls "new epidemics" of *chronic childhood diseases that have increased 400% in the past 50 years*: ADHD, Autism, Asthma, Childhood Cancer, Obesity. Environmental toxins including pesticides have played a large role contributing to these epidemics.³
- AUTISM: UC Davis research on outcomes of young children whose mothers were exposed to synthetic pesticides during pregnancy experienced a *two-thirds increased risk of having a child with autism spectrum disorder or other developmental delays*.^{4,5}
- HORMONE DISRUPTION: Research has demonstrated that that increased exposure to pesticides, even in low doses, *disrupts hormones likely leading to increased risk in serious and costly health problems* such as obesity, breast cancer, infertility, low sperm count in men, pre-term births.⁶
- CANCER: The incidence of adult cancer has skyrocketed. As of 2010, <u>one out of</u> <u>two men</u> and <u>one out of three women</u> will be diagnosed with some sort of cancer during their lifetime.⁷

Let's look at what we know about pesticide use in Hawaii. The Hawaii State Department of Agriculture reports high use of restricted use pesticides (RUPs) across the state. In 2014 alone (the only year data is available), DOA reported amounts of RUPs shipped into Hawaii included over 900,000 pounds of biocides.⁸ Please note that glyphosate, used in RoundUp and identified by the United Nations scientists at IARC as a "probable carcinogen," also is used widely in agrichemical test fields and was not included in this list because it has not been categorized as an RUP.

I agree with Rachel Carson who, over 50 years ago, affirmed that people living in the United States have a basic human right not to be poisoned by our neighbors.⁹ Young children are especially at risk to even small amounts of pesticide exposure due to their still-developing brains and organ systems.

Clearly, communities in Hawai`i deserve better. It is critical to develop creative alternatives that will reduce pesticide exposure in our communities.

Thank you for this opportunity to ask for your <u>support</u> of **HB2564**. 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 Hawai`i's communities, families and young children as well as financial stability in our state for generations to come.

With Respect & Aloha,

Lynn B. Wilson, PhD Registered voter in Waipahu, HI 96797

Mailing Address Same Small Boat Productions, LLC, 1188 Bishop Street, Suite 1502, Honolulu, HI 96813

Tel 808-382-5286

¹ American Academy of Pediatrics, Policy Statement: Pesticide Exposure in Children, Pediatrics, 2012, www.pediatrics.org/cgi/doi/10.1542/peds.2012-2757

² The American College of Obstetricians and Gynecologists, Committee Opinion: Exposure to Toxic Environmental Agents, Obstet Gynecol 2013; 122:931-5.

³ James Perrin et al., The Increase of Childhood Chronic Conditions in the U.S., <u>IAMA</u>, 2007, 297(24): 2755-9

⁴ UC Davis MIND Institute News Release-

http://www.ucdmc.ucdavis.edu/publish/news/newsroom/8978

⁵ UC Davis MIND Institute Research on Perinatal Exposure to Pesticide Products-

http://ehp.niehs.nih.gov/1307044/

⁶ Report on Costs of Impact of Endocrine Disruption in Europe-

http://news.nationalgeographic.com/news/2015/03/150305-chemicals-endocrine-disruptorsdiabetes-toxic-environment-ngfood/

⁷ Sandra Steingraber, Living Downstream: An Ecologist's Personal Investigation of Cancer and the Environment (Cambridge, MA: Da Capo Press), 2010.

⁸ Hawaii State Department of Agriculture Summary of Restricted Use Pesticides Sold in 2014-

http://hdoa.hawaii.gov/pi/files/2015/04/SUMMARY-ALLSALES-2014.pdf

⁹ Rachel Carson, <u>Silent Spring</u>, (NY: Houghton Mifflin), 1962.

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

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

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

www.pediatrics.org/cgi/doi/10.1542/peds.2012-2757 doi:10.1542/peds.2012-2757

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275). Copyright © 2012 by the American Academy of Pediatrics

abstract

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-diethylmeta-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
	N-phenylpyrazoles	Fipronil
Herbicides	Phosphonates	Glyphosate
	Chlorophenoxy herbicides	2,4-D, mecoprop
	Dipyridyl herbicides	Diquat, paraquat
	Nonselective	Sodium chlorate
Rodenticides	Anticoagulants	Warfarin, brodifacoum
	Convulsants	Strychnine
	Metabolic poison	Sodium fluoroacetate
	Inorganic compounds	Aluminum phosphide
Fungicides	Thiocarbamates	Metam-sodium
	Triazoles	Fluconazole, myclobutanil, triadimefon
	Strobilurins	Pyraclostrobin, picoxystrobin
Fumigants	Halogenated organic	Methyl bromide, Chloropicrin
	Organic	Carbon disulfide, Hydrogen cyanide, Naphthalene
	Inorganic	Phosphine
Miscellaneous	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 selfefficacy 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 Com	non Pesticides	: Signs,	Symptoms,	and	Management	Considerations ^a
-------------	----------------	----------	-----------	-----	------------	-----------------------------

Class	Acute Signs and Symptoms	Clinical Considerations
Organophosphate and N-methyl carbamate insecticides	 Headache, nausea, vomiting, abdominal pain, and dizziness 	Obtain red blood cell and plasma cholinesterase levels
	 Hypersecretion: sweating, salivation, lacrimation, rhinorrhea, diarrhea, and bronchorrhea 	Atropine is primary antidote
	 Muscle fasciculation and weakness, and respiratory symptoms (bronchospasm, cough, wheezing, and respiratory depression) 	 Pralidoxime is also an antidote for organophosphate and acts as a cholinesterase reactivator
	 Bradycardia, although early on, tachycardia may be present 	• Because carbamates generally produce a reversible cholinesterase inhibition, pralidoxime is not indicated in these poisonings
	• Miosis	
	 Central nervous system: respiratory depression, lethargy, coma, and seizures 	
Pyrethroid insecticides	 Similar findings found in organophosphates including the hypersecretion, muscle fasciculation, respiratory symptoms, and seizures 	 At times have been mistaken for acute organophosphate or carbamate poisoning
	ullet Headache, fatigue, vomiting, diarrhea, and irritability	 Symptomatic treatment
	• Dermal: skin irritation and paresthesia	 Treatment with high doses of atropine may yield significant adverse results
		Vitamin E oil for dermal symptoms
Neonicotinoid insecticides	 Disorientation, severe agitation, drowsiness, dizziness, weakness, and in some situations, loss of consciousness 	• Supportive care
	 Vomiting, sore throat, abdominal pain 	 Consider sedation for severe agitation
	 Ulcerations in upper gastrointestinal tract 	No available antidote
		 No available diagnostic test
Fipronil (N-phenylpyrazole insecticides)	 Nausea and vomiting 	 Supportive care
	Aphthous ulcers	No available antidote
	 Altered mental status and coma Seizures 	 No available diagnostic test
Lindane (organochlorine insecticide)	 Central nervous system: mental status changes and seizures 	Control acute seizures with lorazepam
	 Paresthesia, tremor, ataxia and hyperreflexia 	Lindane blood level available as send out
Glyphosate (phosphonate herbicides)	Nausea and vomiting	Supportive care
	Aspiration pneumonia type syndrome	 Pulmonary effects may be secondary to organic solvent
	Hypotension, altered mental status, and oliguria in	
	 severe cases Pulmonary effects may in fact be secondary to organic solvent 	
Chlorophenoxy herbicides	 Skin and mucous membrane irritation 	 Consider urine alkalinization with sodium
	 Vomiting, diarrhea, headache, confusion Metabolic acidosis is the hallmark 	bicarbonate in IV fluids
	 Renal failure, hyperkalemia, and hypocalcemia Probable carcinogen 	
Rodenticides (long-acting anticoagulants)	Bleeding: gums, nose, and other mucous membrane sites	• Consider PT (international normalized ratio)
	• Bruising	 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

lopic/Resource	Additional Information	Contact Information
Management of acute pesticide poisoning Recognition and Management of Pesticide Poisonings	Print: fifth (1999) is available in Spanish, English; 6th edition available 2013	http://www.epa.gov/pesticides/safety/healthcare/handbook/ handbook.htm
Regional Poison Control Centers Chonoir avanceurs information and consistent consultation		1 (800) 222-1222
onrome exposure mormation and specially consultation The National Pesticide Medical Monitoring Program (NPMMP)	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
Pediatric Environmental Health Specialty Units (PEHSUs)	Coordinated by the Association of Occupational and Environmental Clinics to provide regional academically based free consultation for health care providers	www.aoec.org/PEHSU.htm; toll-free telephone number (888) 347-A0EC (extension 2632)
Resources for safer approaches to pest control		
US EPA	Consumer information documents	www.epa.gov/oppfead1/Publications/Cit_Guide/citguide.pdf
Citizens Guide to Pest Control and Pesticide Safety	Household pest control Alternatives to chemical pesticides How to choose pesticides	
	 How to choose protocology How to use, store, and dispose of them safely How to prevent pesticide poisoning How to choose a pest-control company 	
Controlling pests	Recommended safest approaches and examples of programs	www.epa.gov/pesticides/controlling/index.htm
The University of Galifornia Integrative Pest Management Program	Information on IPM approaches for common home and garden pests	www.ipm.ucdavis.edu
Other resources		
National research programs addressing children's health and pesticides	 NIEHS/EPA Centers for Children's Environmental Health & Disease Prevention Research 	www.niehs.nih.gov/research/supported/centers/prevention
	 The National Children's Study 	www.nationalchildrensstudy.gov/Pages/default.aspx
US EPA	Pesticide product labels	www.epa.gov/pesticides/regulating/labels/product-labels. htm#projects
The National Library of Medicine "Tox Town"	Section on pesticides that includes a comprehensive and well-organized list of web link resources on pesticides	http://toxtown.nlm.nih.gov/text_version/chemicals.php?id=23

anomalies, pediatric cancers, neurobehavioral 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

TABLE 3 Pesticide and Child Health Resources for the Pediatrician
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

- 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.
- Chronic exposures: become familiar with the subclinical effects of chronic exposures and routes of exposures from the major types of pesticides.
- Resource identification: know locally available resources for acute toxicity management and chronic low-dose exposure (see Table 3).
- 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.

 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 at-tractive 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.
- 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.

- 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.
- 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.
- 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).
- 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.

LEAD AUTHORS

James R. Roberts, MD, MPH Catherine J. Karr, MD, PhD

REFERENCES

- Roberts JR, Karr CK; American Academy of Pediatrics, Council on Environmental Health. Technical report—pesticide exposure in children. *Pediatrics*. 2012:130(6)
- Katz TM, Miller JH, Hebert AA. Insect repellents: historical perspectives and new developments. J Am Acad Dermatol. 2008; 58(5):865–871
- Lewis RG, Fortune CR, Blanchard FT, Camann DE. Movement and deposition of two organophosphorus pesticides within a residence after interior and exterior applications. J Air Waste Manag Assoc. 2001;51(3):339–351
- Hore P, Robson M, Freeman N, et al. Chlorpyrifos accumulation patterns for child-accessible surfaces and objects and urinary metabolite excretion by children for 2 weeks after crack-and-crevice application. *Environ Health Perspect.* 2005;113 (2):211–219
- Gurunathan S, Robson M, Freeman N, et al. Accumulation of chlorpyrifos on residential surfaces and toys accessible to children. *Environ Health Perspect.* 1998;106(1):9–16
- Fenske RA, Black KG, Elkner KP, Lee CL, Methner MM, Soto R. Potential exposure and health risks of infants following indoor residential pesticide applications. *Am J Public Health.* 1990;80(6):689–693
- Nishioka MG, Lewis RG, Brinkman MC, Burkholder HM, Hines CE, Menkedick JR. Distribution of 2,4-D in air and on surfaces inside residences after lawn applications: comparing exposure estimates from various media for young children. *Environ Health Perspect*. 2001;109(11):1185–1191
- Coronado GD, Vigoren EM, Thompson B, Griffith WC, Faustman EM. Organophosphate pesticide exposure and work in pome fruit: evidence for the take-home

COUNCIL ON ENVIRONMENTAL HEALTH EXECUTIVE COMMITTEE, 2012–2013

Jerome A. Paulson, MD, Chairperson Alice C. Brock-Utne, MD Heather L. Brumberg, MD, MPH Carla C. Campbell, MD Bruce P. Lanphear, MD, MPH Kevin C. Osterhoudt, MD, MSCE Megan T. Sandel, MD Leonardo Trasande, MD, MPP Robert O. Wright, MD, MPH

FORMER EXECUTIVE COMMITTEE MEMBERS

Helen J. Binns, MD, MPH

James R. Roberts, MD, MPH Catherine J. Karr, MD, PhD Joel A. Forman, MD James M. Seltzer, MD

LIAISONS

Mary Mortensen, MD – Centers for Disease Control and Prevention/National Center for Environmental Health Walter J. Rogan, MD – National Institute of Environmental Health Sciences Sharon Savage, MD – National Cancer Institute

STAFF

Paul Spire

pesticide pathway. *Environ Health Perspect*. 2006;114(7):999–1006

- Lu C, Fenske RA, Simcox NJ, Kalman D. Pesticide exposure of children in an agricultural community: evidence of household proximity to farmland and take home exposure pathways. *Environ Res.* 2000;84(3): 290–302
- Lu C, Toepel K, Irish R, Fenske RA, Barr DB, Bravo R. Organic diets significantly lower children's dietary exposure to organophosphorus pesticides. *Environ Health Perspect*. 2006;114(2):260–263
- Curl CL, Fenske RA, Kissel JC, et al. Evaluation of take-home organophosphorus pesticide exposure among agricultural workers and their children. *Environ Health Perspect*. 2002;110(12):A787–A792
- Curwin BD, Hein MJ, Sanderson WT, et al. Pesticide contamination inside farm and nonfarm homes. *J Occup Environ Hyg.* 2005; 2(7):357–367
- Shipp EM, Cooper SP, del Junco DJ, Bolin JN, Whitworth RE, Cooper CJ. Pesticide safety training among adolescent farmworkers from Starr County, Texas. J Agric Saf Health. 2007;13(3):311–321
- Gamlin J, Diaz Romo P, Hesketh T. Exposure of young children working on Mexican tobacco plantations to organophosphorous and carbamic pesticides, indicated by cholinesterase depression. *Child Care Health Dev.* 2007;33(3):246–248
- Eckerman DA, Gimenes LA, de Souza RC, Lopes Galvão PR, Sarcinelli PN, Chrisman JR. Age related effects of pesticide exposure on neurobehavioral performance of adolescent farm workers in Brazil. *Neurotoxicol Teratol.* 2007;29(1):164–175
- 16. Landrigan PJ, Claudio L, Markowitz SB, et al. Pesticides and inner-city children:

exposures, risks, and prevention. *Environ Health Perspect*. 1999;107(suppl 3):431–437

- Reigart JR, Roberts JR. Recognition and Management of Pesticide Poisoning, 5th ed. Washington, DC: US Environmental Protection Agency; 1999
- American Academy of Pediatrics, Committee on Environmental Health. Taking an environmental history and giving anticipatory guidance. In: Etzel RA, Balk SJ, eds. *Pediatric Environmental Health.* 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:39–56
- Sofer S, Tal A, Shahak E. Carbamate and organophosphate poisoning in early childhood. *Pediatr Emerg Care*. 1989;5(4):222–225
- Zwiener RJ, Ginsburg CM. Organophosphate and carbamate poisoning in infants and children. *Pediatrics*. 1988;81(1):121– 126
- Lifshitz M, Shahak E, Sofer S. Carbamate and organophosphate poisoning in young children. *Pediatr Emerg Care*. 1999;15(2): 102–103
- Balbus JM, Harvey CE, McCurdy LE. Educational needs assessment for pediatric health care providers on pesticide toxicity. *J Agromed.* 2006;11(1):27–38
- Kilpatrick N, Frumkin H, Trowbridge J, et al. The environmental history in pediatric practice: a study of pediatricians' attitudes, beliefs, and practices. *Environ Health Perspect.* 2002;110(8):823–871
- Trasande L, Schapiro ML, Falk R, et al. Pediatrician attitudes, clinical activities, and knowledge of environmental health in Wisconsin. WMJ. 2006;105(2):45–49
- Karr C, Murphy H, Glew G, Keifer MC, Fenske RA. Pacific Northwest health professionals survey on pesticides and children. J Agromed. 2006;11(3-4):113–120

- Roberts JR, Balk SJ, Forman J, Shannon M. Teaching about pediatric environmental health. Acad Pediatr: 2009;9(2):129–130
- Bronstein AC, Spyker DA, Cantilena LR Jr, Green JL, Rumack BH, Dart RC. 2010 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 26th Annual Report. *Clin Toxicol*. 2011;49(10):910–941
- Baker EL. Sentinel Event Notification System for Occupational Risks (SENSOR): the concept. Am J Public Health. 1989;79(suppl): 18–20
- Whitmore RW, Kelly JE, Reading PL, et al. Pesticides in urban environments. ACS Symp Ser. 1993;522(3):18–36
- US Environmental Protection Agency. Pesticide product labels. Available at: www. epa.gov/pesticides/regulating/labels/productlabels.htm#projects. Accessed October 15, 2012
- US Environmental Protection Agency. Illegal pesticide products. Available at: www.epa.gov/ opp00001/health/illegalproducts. Accessed October 15, 2012
- 32. Kimmel CA, Collman GW, Fields N, Eskenazi B. Lessons learned for the National Children's

Study from the National Institute of Environmental Health Sciences/U.S. Environmental Protection Agency Centers for Children's Environmental Health and Disease Prevention Research. *Environ Health Perspect.* 2005;113(10):1414–1418

33. US General Accounting Office. Agricultural pesticides: Management improvements needed to further promote integrated pest management. Available at: www.gao.gov/ new.items/d01815.pdf. Accessed October 15, 2012

ERRATA

Spooner. 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

PEDIATRICS®

Pesticide Exposure in Children COUNCIL ON ENVIRONMENTAL HEALTH *Pediatrics*; originally published online November 26, 2012; DOI: 10.1542/peds.2012-2757

The online version of this article, along with updated information and services, is located on the World Wide Web at: http://pediatrics.aappublications.org/content/early/2012/11/21/peds.2012-2757

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2012 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.



Pesticide Exposure in Children COUNCIL ON ENVIRONMENTAL HEALTH Pediatrics; originally published online November 26, 2012; DOI: 10.1542/peds.2012-2757

Updated Information & Services	including high resolution figures, can be found at: http://pediatrics.aappublications.org/content/early/2012/11/21 /peds.2012-2757
Citations	This article has been cited by 2 HighWire-hosted articles: http://pediatrics.aappublications.org/content/early/2012/11/21 /peds.2012-2757#related-urls
Post-Publication Peer Reviews (P ³ Rs)	One P ³ R has been posted to this article: http://pediatrics.aappublications.org/cgi/eletters/peds.2012-27 57v1
Errata	An erratum has been published regarding this article. Please see: http://pediatrics.aappublications.org/content/131/5/1013.3.ful l.html
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://pediatrics.aappublications.org/site/misc/Permissions.xh tml
Reprints	Information about ordering reprints can be found online: http://pediatrics.aappublications.org/site/misc/reprints.xhtml

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2012 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.



DEDICATED TO THE HEALTH OF ALL CHILDREN™



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.

References

- 1. Diamanti-Kandarakis E, Bourguignon JP, Giudice LC, Hauser R, Prins GS, Soto AM, et al. Endocrine-disrupting chemicals: an Endocrine Society scientific statement. Endocr Rev 2009;30:293–342. [PubMed] [Full Text] ←
- 2. Woodruff TJ, Janssen S, Guillette LJ Jr, Giudice LC, editors. Environmental impacts on reproductive health and fertility. New York (NY): Cambridge University Press; 2010. ⇐

- Boekelheide K, Blumberg B, Chapin RE, Cote I, Graziano JH, Janesick A, et al. Predicting later-life outcomes of earlylife exposures. Environ Health Perspect 2012;120:1353–61. [PubMed] [Full Text] ⇐
- 4. Woodruff TJ, Zota AR, Schwartz JM. Environmental chemicals in pregnant women in the United States: NHANES 2003-2004. Environ Health Perspect 2011;119:878–85. [PubMed] [Full Text] ←
- Barr DB, Bishop A, Needham LL. Concentrations of xenobiotic chemicals in the maternal-fetal unit. Reprod Toxicol 2007;23:260–6. [PubMed] [Full Text] ⇐
- 6. Rollin HB, Rudge CV, Thomassen Y, Mathee A, Odland JO. Levels of toxic and essential metals in maternal and umbilical cord blood from selected areas of South Africa—results of a pilot study. J Environ Monit 2009;11:618–27. [PubMed] ⇔
- Stern AH, Smith AE. An assessment of the cord blood: maternal blood methylmercury ratio: implications for risk assessment. Environ Health Perspect 2003;111:1465–70. [PubMed] [Full Text] ⇐
- Sutton P, Perron J, Giudice LC, Woodruff TJ. Pesticides matter: a primer for reproductive health physicians. San Francisco (CA): University of California, San Francisco; 2011. Available at: http://prhe.ucsf.edu/prhe/pdfs/pesticides matter_whitepaper.pdf. Retrieved July 22, 2013.
- Bergman A, Heindel JJ, Jobling S, Kidd KA, Zoeller RT, editors. State of the science of endocrine disrupting chemicals 2012. Geneva: World Health Organization; 2013. Available at: http://www.who.int/iris/bitstream/10665/78101/1/ 9789241505031_eng.pdf. Retrieved July 22, 2013. ⇐
- Doherty LF, Bromer JG, Zhou Y, Aldad TS, Taylor HS. In utero exposure to diethylstilbestrol (DES) or bisphenol-A (BPA) increases EZH2 expression in the mammary gland: an epigenetic mechanism linking endocrine disruptors to breast cancer. Horm Cancer 2010;1:146–55. [PubMed] [Full Text] ⇐
- Zota AR, Park JS, Wang Y, Petreas M, Zoeller RT, Woodruff TJ. Polybrominated diphenyl ethers, hydroxylated polybrominated diphenyl ethers, and measures of thyroid function in second trimester pregnant women in California. Environ Sci Technol 2011;45:7896–905. [PubMed] [Full Text] ⇐
- 12. Vogel SA, Roberts JA. Why the toxic substances control act needs an overhaul, and how to strengthen oversight of chemicals in the interim. Health Aff 2011;30:898–905. [PubMed] [Full Text] ⇐
- Woodruff TJ, Parker JD, Kyle AD, Schoendorf KC. Disparities in exposure to air pollution during pregnancy. Environ Health Perspect 2003;111:942–6. [PubMed] [Full Text] ⇐
- Adamkiewicz G, Zota AR, Fabian MP, Chahine T, Julien R, Spengler JD, et al. Moving environmental justice indoors: understanding structural influences on residential exposure patterns in low-income communities. Am J Public Health 2011;101(suppl 1):S238–45. [PubMed] [Full Text] ←
- 15. Morello-Frosch R, Zuk M, Jerrett M, Shamasunder B, Kyle AD. Understanding the cumulative impacts of inequalities in environmental health: implications for policy. Health Aff 2011;30:879–87. [PubMed] [Full Text] ←

- 16. Figa-Talamanca I. Occupational risk factors and reproductive health of women. Occup Med 2006;56:521–31.
 [PubMed] [Full Text] ⇐
- 17. Centers for Disease Control and Prevention. Fourth national report on human exposure to environmental chemicals. Atlanta (GA): CDC; 2009. Available at: http://www.cdc.gov/exposurereport/pdf/FourthReport.pdf. Retrieved July 22, 2013. ⇐
- Hines CJ, Nilsen Hopf NB, Deddens JA, Calafat AM, Silva MJ, Grote AA, et al. Urinary phthalate metabolite concentrations among workers in selected industries: a pilot biomonitoring study. Ann Occup Hyg 2009;53:1–17. [PubMed] [Full Text] ⇐
- 19. McCauley LA. Immigrant workers in the United States: recent trends, vulnerable populations, and challenges for occupational health. AAOHN J 2005;53:313–9. [PubMed]
 ⇐
- 20. Pransky G, Moshenberg D, Benjamin K, Portillo S, Thackrey JL, Hill-Fotouhi C. Occupational risks and injuries in non-agricultural immigrant Latino workers. Am J Ind Med 2002;42:117–23. [PubMed] ←
- National Research Council. Science and decisions: advancing risk assessment. Washington, DC: National Academies Press; 2009. ⇐
- 22. Zoeller RT, Brown TR, Doan LL, Gore AC, Skakkebaek NE, Soto AM, et al. Endocrine-disrupting chemicals and public health protection: a statement of principles from The Endocrine Society. Endocrinology 2012;153:4097–110. [PubMed] [Full Text] ⇐
- 23. University of California San Francisco, Program on Reproductive Health and the Environment. Professional statements database. Available at: http://prhe.ucsf.edu/ prhe/professionalstatements.html. Retrieved July 22, 2013. ⇐
- 24. Sutton P, Woodruff TJ, Perron J, Stotland N, Conry JA, Miller MD, et al. Toxic environmental chemicals: the role of reproductive health professionals in preventing harmful exposures. Am J Obstet Gynecol 2012;207:164–73. [PubMed] [Full Text] ⇔
- 25. Sathyanarayana S, Focareta J, Dailey T, Buchanan S. Environmental exposures: how to counsel preconception and prenatal patients in the clinical setting. Am J Obstet Gynecol 2012;207:463–70. [PubMed] [Full Text] ←
- 26. Ondeck M, Focareta J. Environmental hazards education for childbirth educators. J Perinat Educ 2009;18:31–40.
 [PubMed] [Full Text] ⇐
- 27. Solomon GM, Morse EP, Garbo MJ, Milton DK. Stillbirth after occupational exposure to N-methyl-2-pyrrolidone. A case report and review of the literature. J Occup Environ Med 1996;38:705–13. [PubMed] ⇐
- 28. Centers for Disease Control and Prevention. National Institute for Occupational Safety and Health. Available at: http://www.cdc.gov/niosh. Retrieved July 22, 2013. ⇐
- 29. Lu C, Toepel K, Irish R, Fenske RA, Barr DB, Bravo R. Organic diets significantly lower children's dietary exposure to organophosphorus pesticides. Environ Health Perspect 2006;114:260–3. [PubMed] [Full Text] ←

- 30. Smith-Spangler C, Brandeau ML, Hunter GE, Bavinger JC, Pearson M, Eschbach PJ, et al. Are organic foods safer or healthier than conventional alternatives? A systematic review [published errata appear in Ann Intern Med 2012;157:532; Ann Intern Med 2012;157:680]. Ann Intern Med 2012;157:348–66. [PubMed] [Full Text] ⇐
- 31. Rudel RA, Gray JM, Engel CL, Rawsthorne TW, Dodson RE, Ackerman JM, et al. Food packaging and bisphenol A and bis(2-ethyhexyl) phthalate exposure: findings from a dietary intervention. Environ Health Perspect 2011;119: 914–20. [PubMed] [Full Text] ⇐
- 32. Ji K, Lim Kho Y, Park Y, Choi K. Influence of a five-day vegetarian diet on urinary levels of antibiotics and phthalate metabolites: a pilot study with "Temple Stay" participants. Environ Res 2010;110:375–082. [PubMed] ⇐
- 33. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. Guidelines for perinatal care. 7th ed. Elk Grove Village (IL): AAP; Washington, DC: American College of Obstetricians and Gynecologists; 2012.
- 34. Sathyanarayana S, Alcedo G, Saelens BE, Zhou C, Dills RL, Yu J, et al. Unexpected results in a randomized dietary trial to reduce phthalate and bisphenol A exposures. J Expo Sci Environ Epidemiol 2013;23:378–84. [PubMed] ⇐
- 35. Bailin PS, Byrne M, Lewis S, Liroff R. Public awareness drives market for safer alternatives: bisphenol A market

analysis report. Falls Church (VA): Investor Environmental Health Network; 2008. Available at: http://www.iehn.org/ documents/BPA%20market%20report%20Final.pdf. Retrieved July 22, 2013. ⇐

- 36. Endocrine Society. Endocrine-disrupting chemicals. Chevy Chase (MD): Endocrine Society; 2009. Available at: https:// www.endocrine.org/~/media/endosociety/Files/Advocacy %20and%20Outreach/Position%20Statements/All/ EndocrineDisruptingChemicalsPositionStatement.pdf. Retrieved July 22, 2013. ⇐
- 37. Science and Environmental Health Network. The wingspread statement on the precautionary principle, 1998. Available at: http://www.sehn.org/state.html#w. Retrieved July 22, 2013. ←

Published concurrently in the October 2013 issue of Fertility and Sterility.

Copyright October 2013 by the American College of Obstetricians and Gynecologists, 409 12th Street, SW, PO Box 96920, Washington, DC 20090-6920. All rights reserved.

ISSN 1074-861X

Exposure to toxic environmental agents. Committee Opinion No. 575. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;122:931–5.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 1:12 PM
То:	AGRtestimony
Cc:	lavendoulalove@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Darby Partner CPM LDM	Individual	Support	No

Comments: Aloha, I would like to voice my support of this bill. I ask you to support it as well. Growing children need protection from harmful pesticides, and this bill would provide a program to begin to provide some protection from toxic pesticides. Please pass this bill and provide health to our children. Mahalo.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 11:51 AM
То:	AGRtestimony
Cc:	tampaltin@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Tamara Paltin	Individual	Support	No

Comments: Please pass this common sense bill, we cannot afford to poison our keiki and I hope that the program will be expanded to more than five schools asap Mahalo

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 11:49 AM
То:	AGRtestimony
Cc:	mandalaluna@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Victoria Holloway	Individual	Support	No

Comments: I am seriously concerned with the effects of pesticide application and pesticide drift on our children's health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides year-round. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and extra-special precautions must be taken to protect them from exposure. It is critical that the state take action now to reduce childhood pesticide exposure as this exposure can disrupt critical developmental processes. Please protect out keiki and support HB2564, mahalo!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 7:06 AM
То:	AGRtestimony
Cc:	reclaimingbalance@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Deborah Eudene	Individual	Support	No

Comments: Please protect the 'aina & keiki from the harmful effects of pesticide spraying by approving buffer zones around schools. Mahalo.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 12:26 AM
То:	AGRtestimony
Cc:	tlaloctt@hotmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
tlaloc tokuda	Individual	Support	No

Comments: Aloha, I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of large-scale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State. I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure. It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma. Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Aloha for your consideration.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 10:07 PM
То:	AGRtestimony
Cc:	foodsovereigntynow@gmail.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 7:42 PM
То:	AGRtestimony
Cc:	megan.pittsley@gmail.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 6:40 PM
То:	AGRtestimony
Cc:	fitzformaui@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments: Buffer zones around our schools is common sense! We must protect our kids from chronic overspray. Mahalo to everyone that supports such measures.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 6:15 PM
То:	AGRtestimony
Cc:	kstover@maui.net
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ken Stover	Individual	Support	No

Comments: Please support a buffer zone around our schools and protect them from pesticide drift and the growing of native plants to promote air, soil and water remediation and quality. Thank you.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 5:03 PM
То:	AGRtestimony
Cc:	jennahia@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Noelani Ahia	Individual	Support	No

Comments: I strongly support this legislation!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

2136 Konou Pl. Apt 102 Kihei, Hawaii 96753

Aloha,

I live a few blocks below the fields where Monsanto tests toxic cocktails combining already highly dangerous chemicals. I am concerned for my health, for the other kupuna, and for the children in my building. I've inquired with the Health Dept., and UH about having my house dirt tested, with no response from either.

I support pesticide free zones around schools. Mahalo,

CK Smith

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 3:59 PM
То:	AGRtestimony
Cc:	sd3@hawaii.rr.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 3:49 PM
То:	AGRtestimony
Cc:	alohalways@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Tanja Miller	Individual	Support	No

Comments: Why I AM IN SUPPORT OF THIS BILL: • The issue of pesticides and genetically engineered (GE) seed experimentation is extremely important to our islands, so we are actively organizing to protect the health and safety of our community. • The number of commercial agricultural operations in Hawaii has been increasing rapidly. Children, the elderly, and other sensitive residents have no choice but to live, work, and commute daily in close proximity to areas where restricted use pesticides are being sprayed. Of greatest concern are restricted use pesticides such as chlorpyrifos, which scientists have definitively linked to developmental delays in children. Exposure to other toxic pesticides during fetal, neonatal, and infant life may also disrupt critical development processes. WHAT THESE BILLS DO SB2475 - Buffer Zones Around Sensitive Areas • Aims to protect the state's environment and its residents from the unintended impacts of large-scale pesticide use by establishing buffer zones around sensitive areas including schools and childcare facilities. • Any commercial agricultural entity that purchases or uses an excess of restricted use pesticides annually shall restrict the outdoor application of all pesticides, including restricted use, general use, and experimental use pesticides within a designated distance of any sensitive area, surface water, watershed, or shoreline. HB2564/ SB2742 - Vegetative Buffer Zone Pilot Program • Aims to protect our keiki from the impacts of large-scale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the state. WHY I THINK THESE BILLS ARE GOOD • Buffer zones are a common sense solution for communities who are increasingly concerned about pesticide drift from large agricultural operations in their community. We can and should mitigate any risks these operations post to the future generations of Hawai'i. • The Vegetative Buffer Zone Pilot promotes the growing of native and/or beneficial plant species and vegetation while providing potential opportunities for remediation and filtering to improve air, water, and soil quality. • Pesticide drift happens frequently, particularly in Hawaii due to the common windy and warm conditions of the islands.1,2 • Due to Hawai'i's small size, it has a much higher density of field tests than other states. As a result, more people in Hawai'i live in closer proximity to field test sites than residents of any other state and run a higher risk of experiencing pesticide drift. PESTICIDE EXPOSURE RAISES SERIOUS HEALTH CONCERNS • According to the

Kauai Good Neighbor Program, in the last 13 months 1,975lbs of the powerful insecticide, Chlorpyrifos has been used on Kauai.3 Chlorpyrifos has been linked to lung cancer,4 colorectal cancer,5 and non-Hodgkin's lymphoma.6 • The American Academy of Pediatrics has linked early life pesticide exposure to long-term health effects including cancer,7 decreased cognitive function,8,9,10 behavior problems,11,12 birth defects and other adverse birth outcomes, 13, 14 and asthma. 15 • The American Academy of Pediatrics recommends no-spray zones around schools to ensure the healthy development of our children. • At least 27 schools in Hawaii16 are located within a mile of large agricultural companies that spray restricted-use pesticides. Many residents, including children, have complained about sickness they attribute to pesticide drift.17,18,19,20 • Evidence from other states also suggests that pesticide drift is a frequent occurrence. A study of pesticide exposure at schools in eight states from 1998 to 2002 identified 2.593 individuals who had experienced acute pesticide-related illnesses. Of the 406 cases for which more detailed information was available, nearly one third (31%) involved pesticide drift from farmland while the others involved pesticide use at the school.21 MORE ABOUT THE SEED INDUSTRY & PESTICIDES • Since 1987 Hawai'i has hosted more cumulative GE field trials (3,243) than any other state. In 2014, 178 different GE field tests were conducted on over 1,141 sites in Hawai'i (vs. only 172 sites in California).22 • Herbicide-resistance was the most frequently tested trait in GE crop field tests in Hawai'i over the past five years. This means that plants genetically engineered in Hawai'i, by and large, are engineered to resist ever greater application of herbicides. The Kaua'i Agricultural Good Neighbor Program data reports a total application of 4,018.51 gallons and 2,389.86 pounds of concentrated Restricted Use Pesticides (RUPs) between December 2013 and August 2015, by the five companies that participate in the voluntary program (i.e. Syngenta, Pioneer (Dupont), Dow AgroSciences, BASF and Kaua'i Coffee). 23 REGULATION • Large-scale commercial agricultural operations in Hawai'i are NOT REQUIRED to observe buffer zones around schools, hospitals or other sensitive areas, NOR to disclose any of their spraying activities. • As of 2014, at least nine states had established no-spray buffer zones around sensitive areas such as schools, hospitals and public parks, and while eleven states have established notification requirements for pesticide applications near schools. These policy actions evince growing awareness of the serious health threats posed by pesticide drift. • We would all like to believe that the EPA protects us from pesticide harms, but that is often not the case. There are numerous examples of EPAapproved pesticides that medical scientists have found to be hazardous, several of which are banned in other nations. Additionally, existing federal oversight of pesticide exposure does not take into account chronic exposure to local pesticide use. CREDIT FOR THIS INFORMATION I HAVE LEARNED IS FROM: Pesticides in Paradise: Hawai'i's Health and Environment at Risk report for more information: http://www.centerforfoodsafety.org/reports/3901/pesticidesin- paradise-hawaiis-healthand-environment-at-risk References: 1 AAPCO (2002). Letter from Donnie Dippel, President of AAPCO, to Jay Ellenberger of EPA, March 25, 2002. 2 AAPCO (1999, 2005). "1999 and 2005 Pesticide Drift Enforcement Surveys," Association of American Pesticide Control Officials, 2005. http://www.aapco.org/documents/surveys/drift99.html and http://www.aapco.org/documents/surveys/DriftEnforce05Rpt.html. 3 See https://data.hawaii.gov/Health/Kaua-i-Agricultural-Good-Neighbor-Program-RUP-Use-

/9pud-c8q5 last visited 2/12/15 4 Lee, W.J. Blair, A. Hoppin, J.A. Lubin, J.H. Rusiecki, J.A. Sandler, D.P. Dosemeci, M. & M. C. Alavanja. (2004). "Cancer incidence among pesticide applicators exposed to chlorpyrifos in the Agricultural Health Study." Journal of the National Cancer Institute, 96(23): 1781-9. 5 Lee, W.J. Sandler, D.P. Blair, A. Samanic, C. Cross, A.J. & M.C Alavanja. (2007). "Pesticide use and colorectal cancer risk in the Agricultural Health Study." International Journal of Cancer, 121(2): 339-46. 6 Schinasi, L. & M.E. Leon. (2014). "Non-Hodgkin lymphoma and occupational exposure to agricultural pesticide chemical groups and active ingredients: a systematic review and meta-analysis." International Journal of Environmental Public Health, 11: 4449-4527. 7 Infante-Rivard C, Labuda D, Krajinovic M, Sinnett D. 1999. Risk of childhood leukemia associated with exposure to pesticides and with gene polymorphisms. Epidemiology 10(5): 481-487. 8 Rauh V, Arunajadai S, Horton M, et al. 2011. Sevenyear neurodevelopmental scores and prenatal exposure to chlorpyrifos, a common agricultural pesticide. Environ Health Perspect. 119(8): 1196-1201. 9 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. 10 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. 11 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. 12 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. 13 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. 14 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. 15 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. 16 See http://www.protectourkeiki.org/takeaction/ last visited 2/12/15 17 Hillyer, B. (2008). "Lawmakers concerned about pesticide spraying." Hawai'i News Now, February 5, 2008. http://www.hawaiinewsnow.com/story/7822628/lawmakers-concerned-about-pesticide-

spraying. 18Kalani N. & L. Fujimori. (2014). "Dozens of Kahaluu students sickened by fumes at campus." Honolulu Star-Advertiser, April 4, 2014.

http://www.staradvertiser.com/s?action=login&f=y&id=253867411&id=253867411. 19 Leone, D. (2008). "Odor that got kids sick debated." Honolulu Advertiser, February 24, 2008. Available at:

http://the.honoluluadvertiser.com/article/2008/Feb/24/In/hawaii802240350.html 20 Alarcon, W.A. et al. (2005). "Acute illnesses associated with pesticide exposure at schools." Journal of the American Medical Association, 294(4): 455-465. 21 Alarcon, op. cit., p. 2 22 ISB Locations (2015) Information Systems for Biotechnology. Downloaded 2/14/15 See chart at: http://www.isb.vt.edu/release-summary-data.aspx. 23 HDOA (2015) Kaua'i Good Neighbor Program, Hawai'i Department of Agriculture. Database.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 3:40 PM
То:	AGRtestimony
Cc:	shay.chanhodges@gmail.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Shay Chan Hodges	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 3:13 PM
То:	AGRtestimony
Cc:	stephandjim@aol.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Stephanie Austin	Individual	Support	No

Comments: Please support this important protection for our schoolchildren!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 2:02 PM
То:	AGRtestimony
Cc:	yorkcarlton@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Carlton York	Individual	Support	No

Comments: The world is watching, a safer measure would be to halt all spraying of extreme pesticide poisons in Hawaii, but at the very least we should establish buffers and protect the children and their learning environment.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 1:02 PM
То:	AGRtestimony
Cc:	panther_dave@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Dave Kisor	Individual	Support	No

Comments: In Vietnam, the troops were told agent orange would only kill plants. After a saturation, so many have either died by now or are on the verge, along with many Vietnamese. The chemical corporations are only interested in profit, but at the expense of our health. Buffer zones are alright when there isn't a wind, but that stuff carries.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 12:45 PM
То:	AGRtestimony
Cc:	ndavlantes@aol.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Nancy Davlantes	Individual	Support	No

Comments: These buffer zones would capitalize on the outdoor space surrounding schools to plant native species and promote regenerative agriculture and ecological landscaping. The vegetative buffer zones will serve as natural windbreaks to protect schools against pesticide drift, and ultimately contribute to a safer, healthier learning environment for our keiki.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 11:59 AM
То:	AGRtestimony
Cc:	mandalaluna@yahoo.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Victoria Holloway	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 11:44 AM
То:	AGRtestimony
Cc:	hoonanea@aol.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 11:18 AM
То:	AGRtestimony
Cc:	mmcardle19@aol.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments: Aloha. I fully support HB2564 in order to help protect Hawaii's People and Natural Resources from toxic chemical pollution in our fragile island environment. The health of the Land and People must be a priority. I would amend this bill to include requiring those commercial enterprises using RUP's to fund the buffer zones due to their toxic operations and therefore not placing the burden on Hawaii State Taxpayers.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 9:32 AM
То:	AGRtestimony
Cc:	laurenelaine721@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Lauren Ampolos	Individual	Support	No

Comments: I strongly support this bill and urge you to do the same. Throughout the state, chemicals are sprayed on and near school grounds, adversely affecting our children. At this point, it is not a question that these chemicals are dangerous for our children. We know with certainty that this is true, as evidenced in the scientific literature. The question is how much damage is happening, and what can we do to prevent exposure in order to protect our children. A school in Kauai had to be evacuated due to pesticide drift; children and teachers were adversely affected. We suspect that there are many other schools throughout the state are also likely adversely affected, considering their proximity to the fields where chemicals, including restricted use chemicals, are so often sprayed. Buffer zones are the LEAST that we can do to protect our children. Thus, again, I strongly urge you to support doing everything in your power to protect our schools from chemicals.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.
From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 9:20 AM
То:	AGRtestimony
Cc:	svickery@hawaii.rr.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

<u>HB2564</u>

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 1:23 AM
То:	AGRtestimony
Cc:	fernrosenstiel@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Fern Rosenstiel	Individual	Support	No

Comments: We need all buffer zones and protective measures we can get to protect communities, children, and the environment from any adjacent properties using large amounts of highly hazardous and restricted use pesticides. Labels and current standards to date have failed to provide adequate protections. Thank you for hearing this bill and for helping to pass this pilot project to establish buffers around some schools. Please continue to introduce and help pass meaningful bills, whether they are bans and moratoriums on specific known highly hazardous RUPs, buffer zones for communities, schools and sensitive areas or additional oversight and protections of any kind. Please pass this bill and continue to support all efforts to protect our communities and environment!! Mahalo!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, February 05, 2016 10:41 PM
То:	AGRtestimony
Cc:	orchid6128@aol.com
Subject:	*Submitted testimony for HB2564 on Feb 9, 2016 08:30AM*

<u>HB2564</u>

Submitted on: 2/5/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Deborah Mader	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, February 05, 2016 10:23 PM
То:	AGRtestimony
Cc:	jessicamitchell51@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/5/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

S	Submitted By	Organization	Testifier Position	Present at Hearing
J	essica Mitchell	Individual	Support	No

Comments: I guess a pilot program is a start but buffer zones around schools, and homes, and anywhere people frequent seems to me like it would already be a law.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

<u>Committee on Agriculture</u> Chair Tsuji Vice Chair Onishi

<u>Committee on Energy and Environmental Protection</u> Chair Lee Vice Chair Lowen

Tuesday, February 9, 2016 8:30AM in Conference Room 325

Stella Caban Regenerative Agriculturist

TESTIMONY IN STRONG SUPPORT OF HB2564

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of large-scale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time. Thank you kindly for considering my testimony in strong support of the measure.

Sincerely,

Stella Caban

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 9:57 AM
То:	AGRtestimony
Cc:	waioli2@hawaiiantel.net
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

<u>HB2564</u>

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
chris kobayashi	Individual	Support	No

Comments: Aloha Committee members, Again, you have the opportunity to vote on a common sense bill to help protect all people, animals and other living organisms. This is not about the "science" and following the label. The wind blows and rain creates runoff. In my opinion, no amount of buffer is enough, but it is better than nothing. if you have any doubts about supporting this bill, please picture yourself living and breathing as your unborn or young child or elderly relative in close proximity to these chemical applications whose only object is to kill. (ie. pesticide, fungicide, herbicide) Please support LIFE. Healthy LIFE. mahalo.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 9:32 AM
То:	AGRtestimony
Cc:	acoutu@centerforfoodsafety.org
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Alexandria Coutu	Individual	Support	No

Comments: I am writing in strong support of HB2564, which aims to protect our keiki from the impacts of large-scale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the state. Vegetative buffer zones not only act as a wind-break, but they will provide habitats for critical native species and crops, support soil remediation, and create an outdoor learning space to engage the broader community in agriculture and environmental stewardship. There are at least 27 schools in Hawai'i located within a mile of fields where agrichemical companies like Monsanto and Dow Chemical spray restricted-use pesticides. Based on data released in the Waimea Canyon Class Action litigation, and our aggregation of the Kaua'i 'Good Neighbor Program', we know that these companies spray complex formations of restricted and general use pesticides, year round, multiple times a week, up to sixteen times a dayi. The Kauai GNP data reports that between December 2013 and August 2015, a total application of 4,018.51 gallons and 2,389.86 pounds of concentrated Restricted Use Pesticides were sprayed on Kaua'i by the five participating companies (Syngenta, Pioneer (Dupont), Dow AgroSciences, BASF and Kaua'i Coffee). Although the locations where these pesticides were applied are not reported by this program, we know that the frequency and quantity of use is sufficient to raise concerns about pesticide exposure.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, February 05, 2016 7:23 PM
То:	AGRtestimony
Cc:	bellodgiabellodgia@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/5/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Bellodgia Yamamoto	Individual	Support	No

Comments: It is long overdo to hold the biotech agricultural industry completely accountable and responsible when their practices have harmful environmental impact on bordering residential areas and in particular school zones. School children experiencing chronic long term exposure to pesticides is not something our local government can simply continue to ignore. The proposed pilot program is a step in the right direction to protect these five schools. We must do everything within our power to protect our keiki from irreversible health issues as a result of negligent pesticide exposure.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 07, 2016 1:13 PM
То:	AGRtestimony
Cc:	mnakahata@gmail.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/7/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Mae Nakahata	Individual	Oppose	No

Comments: A pragmatic understanding of pesticides is urgently needed. The size of an operation is irrelevant to the risks posed to a school. There have been adequate cases in which an uninformed homeowner created risk to schools. If passed, this measure supports the use of fear instead of sound science in developing laws, a dangerous trend that is not in the public interest.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 08, 2016 12:34 PM
То:	AGRtestimony
Cc:	grayboy24@aol.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

<u>HB2564</u>

Submitted on: 2/8/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Leslie Takayama	Individual	Oppose	No

Comments: This will place an increasing burden on our agricultural producers.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 06, 2016 11:08 AM
То:	AGRtestimony
Cc:	jennymaliahudson@yahoo.com
Subject:	Submitted testimony for HB2564 on Feb 9, 2016 08:30AM

Submitted on: 2/6/2016 Testimony for AGR/EEP on Feb 9, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
jenny hudson	Individual	Oppose	No

Comments: Concerned citizen absolutely OPPOSED to this bill for the safety of all of us especially our keiki

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

Personal Testimony Presented before the House Committees on Agriculture and Energy & Environmental Protection February 09, 2016 at 8:30 am by Douglas L. Vincent, Ph.D., P.A.S.

HB 2564 Relating to Agriculture

Personal Testimony Opposed to HB 2565

Chair Tsuji and Vice Chair Onishi and Chair Lee and Vice Chair Lowen 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 and have been a member of the faculty at the University of Hawaii at Manoa for over 30 years. I am pleased to provide personal testimony in opposition to HB 2564. This testimony does not represent the position of the University of Hawaii or the College of Tropical Agriculture and Human Resources.

I am opposed to this bill and believe that this bill would put serious constraints on our farmers on their use of restricted use pesticides. The use of these pesticides are already controlled and heavily regulated in their use and placing additional restrictions and penalties will make it difficult for our farmers to make a profit. The idea of buffer zones might be make sense in an ideal setting but the implementation would wreak havoc. Excessive buffer zones would limit a farmer's ability to raise a crop by eliminating land he or she could farm, increasing the costs to farmers. Requiring farmers to take land out of production will reduce income while increasing costs through requiring farmers to plant hedges or rows of trees.

If penalties and restrictions on the use of these pesticides are applied only to farmers, then why aren't they applied to other users of pesticides such as resorts, golf courses, and even homeowners. What about tent fumigation? I live across the street from a school. If the school is selected as a pilot school, I might not be able to use the legal services of a pesticide company to control my pests or have my home fumigated. It's difficult to imagine that this bill will do anything but limit our farmer's ability to farm. Thank you for the opportunity to provide testimony in opposition to HB 2564.

From: Sent: To: Subject: Alicia Wills <alicia@palmvalleyfarm.com> Monday, February 08, 2016 4:26 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Alicia Wills

Hakalau

From: Sent: To: Subject: Antya Miller <millera012@hawaii.rr.com> Monday, February 08, 2016 12:32 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii's farmers placing unproven blame and burden on them.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames farmers and agricultural operations.

Stop Blaming Farmers, We choose Facts over Fear!

Antya Miller

Haleiwa

From: Sent: To: Subject: Carl Roth < Bigdadcdr@aol.com> Monday, February 08, 2016 7:52 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Carl Roth

Mililani

From: Sent: To: Subject: Curt Oishi <curtsoishi@yahoo.com> Sunday, February 07, 2016 10:33 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Curt Oishi

Hilo

From: Sent: To: Subject: Darcey Nobriga <info@heartofpalmhi.com> Monday, February 08, 2016 6:41 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Darcey Nobriga

Laupahoehoe

From: Sent: To: Subject: Dee Montgomery-Brock <brock002@hawaii.rr.com> Monday, February 08, 2016 8:24 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Dee Montgomery-Brock

Mililani

From: Sent: To: Subject: Diana McClure <dirathbun2@aol.com> Sunday, February 07, 2016 7:52 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Diana McClure

Kahului

From: Sent: To: Subject: Elaine Olson <espamtrap@gmail.com> Sunday, February 07, 2016 6:43 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Elaine Olson

Kula

From: Sent: To: Subject: Elias Ednie <eliasednie@gmail.com> Sunday, February 07, 2016 8:06 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Elias Ednie

Captain Cook, HI

From: Sent: To: Subject: Fidel Jularbal <fjularbal@msn.com> Sunday, February 07, 2016 9:46 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Fidel Jularbal

Waiphu

From: Sent: To: Subject: Finney Bryant <nser@hawaiiantel.net> Sunday, February 07, 2016 6:54 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Finney Bryant

Haleiwa

From: Sent: To: Subject: George Pace <surfgeorge@yahoo.com> Sunday, February 07, 2016 6:54 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

George Pace

mountain view

From: Sent: To: Subject: Grayson Inouye <grayson@pacflor.com> Monday, February 08, 2016 8:10 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Grayson Inouye

Keaau

From: Sent: To: Subject: James Ingamells < leeingamells@gmail.com> Monday, February 08, 2016 2:24 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

James Ingamells

Mililani HI 96789

From: Sent: To: Subject: Jeff Welsh <jeff.welsh@syngenta.com> Monday, February 08, 2016 8:47 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Jeff Welsh

Kalaheo

From:	Jerry Brower <letfarmersfarm@jbbrower.net></letfarmersfarm@jbbrower.net>
Sent:	Monday, February 08, 2016 9:29 AM
То:	AGRtestimony
Subject:	Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Jerry Brower

Hilo

From:	Jesse Stiefel <jesse.j.stiefel@gmail.com></jesse.j.stiefel@gmail.com>
Sent:	Monday, February 08, 2016 3:18 AM
To:	AGRtestimony
Subject:	Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Jesse Stiefel

Kapolei

From:	Joni Kamiya <jonikamiya@gmail.com></jonikamiya@gmail.com>
Sent:	Sunday, February 07, 2016 7:46 PM
To:	AGRtestimony
Subject:	Oppose HB 2564 Relating to Vegetative Buffers

Aloha Chair Tsuji and committee members,

This is the third year that farmers are having to defend themselves against misinformation perpetuated by Washington DC based groups like the Center for Food Safety and California based Pesticide Action Network. The goals of these groups are the elimination of agricultural technology.

As you can see, my dad and brother aren't at the hearings anymore. Our farm is in the midst of moving fields and their valuable time has to be spent there. Farming is a 7 day a week job that makes very little money but it's a passion and a family legacy that we wish to continue.

I'm speaking out against these proposed bill because it sets a precedent that will ultimately trickle down to the small farmers undoubtedly. We don't have millions of dollars and countless hours to spend fighting frivolous lawsuits. That is the goal in enacting these bills, lawsuits.

The evidence on crop protection items is clear. They are safer now then they were before. Back in the 60's, my dad lost a friend to pesticides because his sprayer leaked a single drop on his back. He died the next day. That is unheard of these days. If you limit the access to these items without evidence, we may have no other option but to use more toxic items.

As with all legislation, you have a duty to review the evidence and the resulting consequence. You also have to use the public resources wisely also and direct it to where it's needed most.

Mahalo for your time. Support farmers in Hawaii.

Joni Kamiya

Kaneohe

From: Sent: To: Subject: Kathleen Hashimoto <kathyhashimoto@hawaii.rr.com> Sunday, February 07, 2016 7:37 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Kathleen Hashimoto

Kailua

From: Sent: To: Subject: Kristin Mack <farmnforages@gmx.com> Sunday, February 07, 2016 7:24 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture. The legislature claims to support local agriculture, but continuously entertains these type of bills which necessarily burden our producers!

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Kristin Mack

Kula

From: Sent: To: Subject: Laurie Yoshida <laurieyoshida@gmail.com> Sunday, February 07, 2016 6:54 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Laurie Yoshida

Lihue

From: Sent: To: Subject: Leon Corzine < Ipcfarms@ctiwireless.com> Monday, February 08, 2016 1:52 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Hawaii agriculture is vitally important to all US agriculture. Hawaii farmers cannot be saddled with the unfounded expense and burden of this proposed bill.

Stop Blaming Farmers, We choose Facts over Fear!

Leon Corzine

Assumption

From: Sent: To: Subject: Luana Beck <hooluanaranch@yahoo.com> Sunday, February 07, 2016 7:27 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Luana Beck

Mt. View

From: Sent: To: Subject: Luly Unemori <luly.unemori2@hawaiiantel.net> Monday, February 08, 2016 8:24 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Aloha Honorable Representatives,

I oppose HB 2564, please do not pass it.

Ag in Hawaii already faces huge challenges and pressures. This proposed action unfairly targets farmers and will only make it harder and more costly for farmers to succeed.

I believe there is a lot of misinformation, confusion and unnecessary fear about agriculture, including pesticide use. We all want ag in Hawaii, but so few people seem to really understand what it takes for ag to thrive. There's a tremendous disconnect.

I ask you, as leaders of our state, to please find ways to help and support farmers through informed, fact-based, positive action, not an anti-ag bill like this.

Thank you so much for our consideration.

Luly Unemori

Wailuku
From: Sent: To: Subject: Mario Gaggero <tanegg@gmail.com> Monday, February 08, 2016 5:58 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Mario Gaggero

Kihei

From: Sent: To: Subject: masao nakamura <nakamura1382@aol.com> Sunday, February 07, 2016 9:54 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

masao nakamura

Hilo

From: Sent: To: Subject: Michael Weitzenhoff <mzen@hawaii.rr.com> Sunday, February 07, 2016 8:09 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Michael Weitzenhoff

Kailua

From: Sent: To: Subject: paul singleton <paul@waipoligreens.com> Sunday, February 07, 2016 8:10 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

paul singleton

Kula

From:	
Sent:	
To:	
Subject:	

Renee Kester <rkester1@gmail.com> Monday, February 08, 2016 8:03 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Renee Kester

Kaunakakai

From: Sent: To: Subject: Rhonda Russell <rrussell@keck.hawaii.edu> Monday, February 08, 2016 8:27 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Rhonda Russell

HONOKAA

From: Sent: To: Subject: Rhonda Stoltzfus <stoltzfus34@yahoo.com> Sunday, February 07, 2016 7:38 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Rhonda Stoltzfus

Kihei

From: Sent: To: Subject: Ron Kauhaahaa <aoronk@me.com> Sunday, February 07, 2016 8:14 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Ron Kauhaahaa

Waipahu

From: Sent: To: Subject: Stephanie Iona <Stephanieiona808@gmail.com> Monday, February 08, 2016 12:59 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Stephanie Iona

waimea

From: Sent: To: Subject: Steve Lupkes <lupkes4@aol.com> Sunday, February 07, 2016 7:07 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Steve Lupkes

Kekaha

From: Sent: To: Subject: Thong Teng Neo <neo@greenpointnursery.com> Sunday, February 07, 2016 6:37 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Thong Teng Neo

Hilo

From: Sent: To: Subject: Wayne Hashimoto <wkhashi@msn.com> Monday, February 08, 2016 8:08 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Wayne Hashimoto

Kaumakanih

From: Sent: To: Subject: Yvonne Kealoha <gmafrenchy@hotmail.com> Sunday, February 07, 2016 7:55 PM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Yvonne Kealoha

Kalaheo, Kauai

From: Sent: To: Subject: David S De Luz Jr <djr@teamdeluz.com> Monday, February 08, 2016 11:44 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly targets agriculture.

We need to ENCOURAGE our Farmers to Farm and stop using Fear, but rather facts and education as our tools!

David S De Luz Jr

Hilo

From: Sent: To: Subject: Shay Sunderland <shay.l.sunderland@gmail.com> Monday, February 08, 2016 10:08 AM AGRtestimony Oppose HB 2564 Relating to Vegetative Buffers

Dear Representative Tsuji & Lee; Chair(s) and Joint Committee Members,

I oppose HB 2564, it unfairly targets Hawaii farmers placing unfounded blame and burden on Hawaii farmers and agriculture.

An important area to consider is the history of pesticide incidents when it comes to schools. The Hawaii State Department of Agriculture issued a thorough report examining school evacuations relating to pesticides dating back to 2006. They found that none were due to the actions of "large scale, outdoor commercial agricultural operations" to use the language of Section 1 of this legislation.

The majority of the incidents were due to the use of pesticides by homeowners. Yet this Bill unfairly blames agriculture.

Stop Blaming Farmers, We choose Facts over Fear!

Shay Sunderland

Mililani

From: Sent: To: Subject: Andrea Schmitt <andreaschmitt@msn.com> Monday, February 08, 2016 1:12 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot pr ogram of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Andrea Schmitt 27 Heona Pl Kihei, HI 96753

From: Sent: To: Subject: Alda St. James <aldamaui@yahoo.com> Saturday, February 06, 2016 1:26 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot prog ram of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Alda St. James 148 Ehilani St. Maui Hawaii, HI 96768

From: Sent: To: Subject: Alyshea Hiraga <H.alyshea@gmail.com> Saturday, February 06, 2016 1:53 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Alyshea Hiraga Koauka loop Aiea, HI 96701

From: Sent: To: Subject: Alapai Kauila <alapaikaulia@gmail.com> Sunday, February 07, 2016 9:14 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Alapai Kauila Po box 852 Kailua kona, HI 96740

From: Sent: To: Subject: Alan Ewell <ewell@hawaii.rr.com> Saturday, February 06, 2016 2:35 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Alan Ewell 4176 Round Top Drive Honolulu, HI 96822

From: Sent: To: Subject: Autumn ness <autumnness@yahoo.com> Monday, February 08, 2016 9:12 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot progr am of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Autumn ness 75 namauu pl kihei, HI 96753

From: Sent: To: Subject: Angeline Zhou <azhou16@punahou.edu> Monday, February 08, 2016 12:30 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native a nd regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Angeline Zhou 829 11 Avenue Honolulu, HI 96816

From: Sent: To: Subject: Aimee Lipat <aimeelipat@Yahoo.com> Sunday, February 07, 2016 10:28 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot p rogram of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Aimee Lipat 44-108 Ikeanani Dr Kaneohe, HI 96744

From: Sent: To: Subject: AnneMarie Call <joy@yahoo.com> Saturday, February 06, 2016 10:43 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and rege nerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

AnneMarie Call 3470 Woodside Lane San Jose, CA 95121

From: Sent: To: Subject: Alex Oshiro <djrx.cares@hawaii.rr.com> Saturday, February 06, 2016 9:34 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Stop poisoning our children for profit and greed.

Alex Oshiro 1920 Kahakai Dr. Honolulu, HI 96822

From: Sent: To: Subject: Alisa Tripp <alisamber@yahoo.com> Saturday, February 06, 2016 9:07 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Alisa Tripp P.O. Box 232 Papaaloa, HI 97680

From: Sent: To: Subject: Allegea Love <allegralove11@gmail.com> Sunday, February 07, 2016 6:02 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative veget ative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Allegea Love Keonekai Kihei, HI 96753

From: Sent: To: Subject: Amanda Corby <aacorby@gmail.com> Monday, February 08, 2016 11:38 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer z ones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Amanda Corby PO Box 61676 Honolulu, HI 96839

From: Sent: To: Subject: Amy Tatik <amy1108@aol.com> Saturday, February 06, 2016 3:12 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerat ive vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Amy Tatik 28 Hoohale Street kihei, HI 96753

From: Sent: To: Subject: Andrea Anixt <andreapeatmoss@gmail.com> Monday, February 08, 2016 8:15 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Andrea Anixt P O Box 646 Ka'a'awa, HI 96730

From: Sent: To: Subject: Andres Ramirez <andres.ramirez8@hawaiiantel.net> Saturday, February 06, 2016 8:55 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Andres Ramirez 1045 Haiku Rd Haiku, HI 96708

From: Sent: To: Subject: Ann Evans <mauimagic5711@hotmail.com> Sunday, February 07, 2016 8:14 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Ann Evans Makani Rd Makawao, HI 96768

From: Sent: To: Subject: Ann Strong <kaloli.pt@gmail.com> Saturday, February 06, 2016 3:52 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Ann Strong 15-1014 Kiawe Keaau, HI 96749

From: Sent: To: Subject: Anna Santoro <anna.santoro@gmail.com> Monday, February 08, 2016 9:42 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regener ative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Anna Santoro 59-215 KE Nui Rd Haleiwa, HI 96712

From: Sent: To: Subject: Astrid Watanabe <rustysfarm@hawaiiantel.net> Sunday, February 07, 2016 11:08 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce chi ldhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Astrid Watanabe 2618 Pololei Pl Haiku, HI 96708

From: Sent: To: Subject: Barb Cuttance <barb@kanekiki.com> Saturday, February 06, 2016 9:54 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Barb Cuttance 14/266 Papaya Farms Road Pahoa, HI 96778
From: Sent: To: Subject: Barbara Lee Loy <bigislandbarb.alford@gmail.com> Saturday, February 06, 2016 2:17 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Barbara Lee Loy PO Box 239 Hakalau, HI 96710

From: Sent: To: Subject: Brandon Lund <blund73@yahoo.com> Monday, February 08, 2016 1:36 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regener ative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Brandon Lund Mapu pl Kihei, HI 96753

From: Sent: To: Subject: Brad Parsons <kauaibrad@hotmail.com> Saturday, February 06, 2016 10:51 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Brad Parsons P.O. Box 223374 Princeville, HI 96722

From: Sent: To: Subject: Bonnie Marsh <naturadoc@gmail.com> Saturday, February 06, 2016 11:40 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and rege nerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Bonnie Marsh 905 Kokomo Rd Haiku, HI 96708

From: Sent: To: Subject: bonnie chadwick <bonbon2@hawaii.rr.com> Saturday, February 06, 2016 10:58 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic expos ure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

bonnie chadwick 21 nia place LAHAINA, HI 96761

From: Sent: To: Subject: Barbara Nosaka < barbrick@hawaiiantel.net> Saturday, February 06, 2016 10:52 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative b uffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Barbara Nosaka 2216 Hoonanea Street Honolulu, HI 96822

From: Sent: To: Subject: Beth Sullivan <Kamij9@yahoo.com> Saturday, February 06, 2016 1:39 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative v egetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Beth Sullivan 64344 Hohola Kamuela, HI 96743

From: Sent: To: Subject: Berrie Straatman <bernene@hotmail.com> Saturday, February 06, 2016 2:53 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative b uffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Berrie Straatman 469 Ena Rd. Honolulu, HI 96815

From: Sent: To: Subject: Brady townsend <Kilkertiller909@yahoo.com> Monday, February 08, 2016 9:09 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Brady townsend Lanikai haiku, HI 96708

From: Sent: To: Subject: Brian Emmons <brimohi@msn.com> Sunday, February 07, 2016 9:47 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pi lot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Brian Emmons 1755 Waiola St Honolulu, HI 96826

From: Sent: To: Subject: brian murphy <bmurphy420@mail.com> Monday, February 08, 2016 11:41 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative v egetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

brian murphy PO BOX 322 Puunene, HI 96784

From: Sent: To: Subject: Bridget Slevin <bridgettravels@gmail.com> Monday, February 08, 2016 11:08 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Bridget Slevin 6123 N Mandalay Dr Peoria, IL 61614

From: Sent: To: Subject: Caroline Delano <carolinesdelano@aol.com> Saturday, February 06, 2016 7:12 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regener ative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Caroline Delano RR 2 Box 4792 Pahoa, HI 96778

From: Sent: To: Subject: Caron Nakamura <ccnaka@yahoo.com> Saturday, February 06, 2016 10:27 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and re generative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Caron Nakamura 45-1036 Anoi Rd. Kaneohe, HI 96744

From: Sent: To: Subject: Cherub Silverstein < Cherubbliss@hotmail.com> Sunday, February 07, 2016 6:03 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Cherub Silverstein 1465 Waianuenue Ave Hilo, HI 96720

From: Sent: To: Subject: Cheryl Sterling <reefgirlmaui@hotmail.com> Sunday, February 07, 2016 12:40 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Cheryl Sterling 2020 Main Street #505 Wailuku, HI 96793

From: Sent: To: Subject: Chuck Needham <chuckdneedham@gmail.com> Saturday, February 06, 2016 2:11 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative v egetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Chuck Needham PO Box 1287 Pahoa, HI 96778

From: Sent: To: Subject: Cyrus Howe <cwhowe@gmail.com> Saturday, February 06, 2016 10:27 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Cyrus Howe 1821 Keeaumoku Street #203 Honolulu, HI 96822

From: Sent: To: Subject: Clara Morgan <clara.mrgn@gmail.com> Saturday, February 06, 2016 11:46 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Clara Morgan 270 Bellevue Avenue, #243 Newport, RI 02840, HI 96732

From: Sent: To: Subject: Crystal West <crystalinx@yahoo.com> Saturday, February 06, 2016 10:55 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Crystal West 55-3556 Kaauhuhu Road Hawi, HI 96719

From: Sent: To: Subject: Carol Beardmore <willie.cb@gmail.com> Saturday, February 06, 2016 12:29 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Carol Beardmore 1051 Puuopae Road Kapaa, HI 96746

From: Sent: To: Subject: Colleen Chapman <Collardgreen@gmail.com> Monday, February 08, 2016 3:58 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

This affects me personally. My home and my children's school are within a mile of GMO test fields. Soon after giving birth last year, I contacted DuPont Pioneer to ask about pesticide use. I was told that chlorpyrifos was sprayed during my pregnancy. In light of recent studies, (http://www.ucdmc.ucdavis.edu/publish/news/newsroom/8978), I am deeply concerned. I know families in nearby neighborhoods whose children have autism and developmental delays. We can't turn a blind eye to the scientific reality that pesticide drift has dire consequences. Thankfully, we can mitigate the problem by first requiring buffer zones. It's the first step to protecting the most vulnerable - the next generation. We can't wait any longer for health effects to become so drastic that it warrants bans. The time is now.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Colleen Chapman 67-427 Kekauwa St. Waialua, HI 96791

From: Sent: To: Subject: cora grether <coraflora@live.com> Monday, February 08, 2016 8:32 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by e stablishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

cora grether 80 haele pl. makawao, HI 96768

From: Sent: To: Subject: Courtney Bruch <lotuslover@hotmail.com> Monday, February 08, 2016 7:28 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Courtney Bruch POB 735 makawao, HI 96868

From: Sent: To: Subject: Daniela Smith <Danielasmith1106@gmail.com> Saturday, February 06, 2016 4:17 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishin g a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Daniela Smith 35-2054 old mamalahoa hwy Papaaloa, HI 96780

From: Sent: To: Subject: Danielle Spitz <dspitzrealtor@gmail.com> Sunday, February 07, 2016 8:04 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Danielle Spitz 75-638 Kula Kai Place Kailua-Kona, HI 96740

From: Sent: To: Subject: Danya Hakeem <dhakeem@centerforfoodsafety.org> Sunday, February 07, 2016 2:24 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regen erative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Danya Hakeem 743 18th Ave Honolulu, HI 96816

From: Sent: To: Subject: david sutton <malamaourworld@gmail.com> Sunday, February 07, 2016 8:58 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

david sutton PO Box 1159 Kilauea, HI 96754

From: Sent: To: Subject: d.c. hove <dchove57@gmail.com> Sunday, February 07, 2016 1:06 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

d.c. hove 91-1014 mikohu st. ewa beach, hi 96706, HI 96706

From: Sent: To: Subject: delbert contival <dcontival@hawaii.rr.com> Saturday, February 06, 2016 5:03 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesti cide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

delbert contival 3885 Waha Rd. Kalaheo, HI 96741

From: Sent: To: Subject: Denise Hennig <den@aloha.net> Sunday, February 07, 2016 7:32 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and re generative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Denise Hennig P.O. Box 630098 Lanai City, HI 96763

From: Sent: To: Subject: Diane Echerri <Ladydiisalive@gmail.com> Sunday, February 07, 2016 6:16 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Diane Echerri 110 Pualu Pl Lahaina, HI 96761

From: Sent: To: Subject: Donna Pignolet <dtpignolet@gmail.com> Monday, February 08, 2016 6:21 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Donna Pignolet 66-901Lupenui Pl Waialua, HI 96791

From: Sent: To: Subject: Denise Woods <dbwoodsluv@hotmail.com> Saturday, February 06, 2016 12:39 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Denise Woods pmb 128 Kapaa, HI 96746

From: Sent: To: Subject: Don Erway <der1way@earthlink.net> Saturday, February 06, 2016 12:55 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Don Erway 77-6455 Princess Keelikolani Dr. Kailua Kona, HI 96740

From: Sent: To: Subject: Edgar Espero <edgarespero@gmail.com> Monday, February 08, 2016 10:21 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Edgar Espero 91-944 Waihua PL Ewa Beach, HI 96706
From: Sent: To: Subject: Elif Beall <elif.beall@gmail.com> Sunday, February 07, 2016 4:24 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Elif Beall PO Box 1304 Kilauea, HI 96754

From: Sent: To: Subject: Elizabeth Pu'u lizrandazzo3@gmail.com> Monday, February 08, 2016 12:09 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Elizabeth Pu'u 3424 cherry Lane Unit C Woodbury, MN 55129

From: Sent: To: Subject: Ellie Rae <Ellierae808@gmail.com> Monday, February 08, 2016 12:19 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesti cides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Ellie Rae Waiko road Puunene, HI 96793

From: Sent: To: Subject: ELIA BRUNO <eliab@hawaii.edu> Saturday, February 06, 2016 10:49 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

ELIA BRUNO Manoa Rd HONOLULU, HI 96822

From: Sent: To: Subject: Eric Voorhies <ericv63@msn.com> Saturday, February 06, 2016 10:34 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Eric Voorhies 6212 Olohena Kapaa, HI 96746

From: Sent: To: Subject: Ernest Jepson <scottspalapa@yahoo.com> Sunday, February 07, 2016 4:46 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Ernest Jepson PO Box 724 Kihei, HI 96753

From: Sent: To: Subject: Fay Jacinto <secretgarden9@outlook.com> Sunday, February 07, 2016 4:26 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative ve getative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Fay Jacinto 152 Hokai Place Kihei, HI 96753

From: Sent: To: Subject: francis kane <xenokane@gmail.com> Saturday, February 06, 2016 3:14 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

francis kane po81482 haiku, HI 96708

From: Sent: To: Subject: Gregg Kravitz <Greggbkravitz@gmail.com> Sunday, February 07, 2016 8:43 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Gregg Kravitz 4009 Kaikio'ewa Place Princeville, HI 96722

From: Sent: To: Subject: Gretchen Losano <gleisenring@gmail.com> Monday, February 08, 2016 12:23 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Gretchen Losano pmb#162 5095 Napilihau st. 109B lahaina, HI 96761

From: Sent: To: Subject: Gary Johnson <orchids_7@hotmail.com> Sunday, February 07, 2016 8:37 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Gary Johnson 355 Aoloa St. Kailua, HI 96734

From: Sent: To: Subject: Gregory Gatchell <greggatchell@hotmail.com> Sunday, February 07, 2016 7:08 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and r egenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Gregory Gatchell 445 seaside avenue Honolulu, HI 96815

From: Sent: To: Subject: HAL Milton <Hal99992001@Gmail.Com> Sunday, February 07, 2016 2:17 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regener ative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

HAL Milton 54-396 Union Mill Rd KAPAAU, HI 96755

From: Sent: To: Subject: Heather Salmon <HeatherLSalmon@gmail.com> Sunday, February 07, 2016 2:28 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and reg enerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Heather Salmon 23 Door of Faith Road Huelo, HI 96708

From: Sent: To: Subject: Hilary Barsby <hilary.barsby@gmail.com> Monday, February 08, 2016 7:02 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Hilary Barsby 263 Keonekai Rd Kihei, HI 96753

From: Sent: To: Subject: Haley Randell <haleyrandell9@gmail.com> Saturday, February 06, 2016 9:54 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exp osure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Haley Randell 4402 Clarey Blvd Honolulu, HI 96818

From: Sent: To: Subject: Huldah Simpson <Infiniteheart8@yahoo.com> Saturday, February 06, 2016 2:20 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Huldah Simpson 1730 marston place Haiku, HI 96708

From: Sent: To: Subject: Jacob Kimi <Jacob.kkona@hotmail.com> Sunday, February 07, 2016 11:02 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of nati ve and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Jacob Kimi 75-5816 Lupa place Kailua kona, HI 96740

From: Sent: To: Subject: James Robinson <jdr4282@gmail.com> Monday, February 08, 2016 10:52 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

James Robinson 6717 N Concord Ave Portland, OR 97217

From: Sent: To: Subject: Jamie Louis <jlouis@hawaii.edu> Saturday, February 06, 2016 4:51 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of nati ve and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Jamie Louis PO Box 269 Pearl City, HI 96782

From: Sent: To: Subject: Janet Pappas <jpappas60@gmail.com> Sunday, February 07, 2016 10:07 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot prog ram of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Janet Pappas 98-1287 Akaaka St Aiea, HI 96701

From: Sent: To: Subject: Jeff Daniel <jeffdgc@hawaii.rr.com> Saturday, February 06, 2016 3:14 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegeta tive buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Jeff Daniel 1964 Piimauna Place Honolulu, HI 96821

From: Sent: To: Subject: Jing Liu <jing6@hawaii.edu> Saturday, February 06, 2016 2:02 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Jing Liu 2137 Dole st. Honolulu, HI 96822

From: Sent: To: Subject: Javier Mendez <mendezj@hawaii.edu> Monday, February 08, 2016 12:25 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Javier Mendez 1326B Alewa Dr. Honolulu, HI 96817

From: Sent: To: Subject: Joanna Weber <joanna.franz@gmail.com> Saturday, February 06, 2016 8:21 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Joanna Weber 76-789 'Io Place Kailua-Kona, HI 96740

From: Sent: To: Subject: Jonathan Boyne <boyne@hawaii.edu> Saturday, February 06, 2016 1:17 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Jonathan Boyne Kakela Dr. Honolulu, HI 96822

From: Sent: To: Subject: John Naylor <jdancer@kula.us> Saturday, February 06, 2016 12:22 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and rege nerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

John Naylor P.O. Box 1749 makawao, HI 96768

From: Sent: To: Subject: John Davis < Alohaainaservices@gmail.com> Saturday, February 06, 2016 10:20 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones a round five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

John Davis 485 Waianuenue Ave #147K Hilo, HI 96720

From: Sent: To: Subject: John Meanire <h2ohtech@yahoo.com> Saturday, February 06, 2016 11:14 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

John Meanire 75-335 Nani Kailua dr Kailua Kona, HI 96740

From: Sent: To: Subject: Jill Simon <sillyjilly@hawaii.rr.com> Saturday, February 06, 2016 11:17 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Jill Simon 77-112 Nahale PI. Kailua Kona, HI 96740

From: Sent: To: Subject: Joanna Weber <joanna.franz@gmail.com> Saturday, February 06, 2016 10:28 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Joanna Weber 76-789 'Io Place Kailua-Kona, HI 96740

From: Sent: To: Subject: James Lee <jamesj@james-barry.net> Monday, February 08, 2016 1:20 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buff er zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

James Lee 3136 South Kihei Road Kihei, HI 96753

From: Sent: To: Subject: John Veronica <JohnJohnAndVeronica@gmail.com> Saturday, February 06, 2016 10:27 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

John Veronica Pupukea Hale'iwa, HI 96712

From: Sent: To: Subject: Karen Stokely <imaginekrs@yahoo.com> Monday, February 08, 2016 9:39 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Karen Stokely 59-032 Kam Hwy. Hale'iwa, HI 96712

From: Sent: To: Subject: Katherine Lahey <kativasti@gmail.com> Sunday, February 07, 2016 11:51 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Katherine Lahey 54-5576 Pawai Place #354 Kailua-Kona, HI 96740

From: Sent: To: Subject: Kathy Shimata <kshimata@hawaiiantel.net> Saturday, February 06, 2016 5:45 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Kathy Shimata 3453 Pawaina St Honolulu, HI 96822
From: Sent: To: Subject: Kay Howe <maryk8@hawaii.edu> Saturday, February 06, 2016 4:19 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vege tative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Kay Howe 221 B, West Lanikaula St. Hilo, HI 96720

From: Sent: To: Subject: Keith Krueger <dcavebear@gmail.com> Sunday, February 07, 2016 8:55 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Keith Krueger POBox 61038 Honolulu, HI 96839

From: Sent: To: Subject: Kami Carter <Kamij9@gmail.com> Saturday, February 06, 2016 1:37 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Kami Carter 6434 hohola Kamuela, HI 96743

From: Sent: To: Subject: Kevin Kekoa <kkekoa@gmail.com> Saturday, February 06, 2016 10:56 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Kevin Kekoa 1212 Punahou Street Honolulu, HI 96826

From: Sent: To: Subject: Kelly Wadlegger <kwadlegger@hotmail.com> Monday, February 08, 2016 12:05 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxi c exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Kelly Wadlegger 4020 Lurline Driv Honolulu, HI 96816

From: Sent: To: Subject: Katherine Saluzzo <K_day_2002@yahoo.com> Saturday, February 06, 2016 1:21 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zon es around five schools across the State.

I am deeply concerned with the effects of pesticide application and pestilcide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Katherine Saluzzo 860 malulani st. Kihei, HI 96753

From: Sent: To: Subject: Keala Ortiz <kealawaiwai@yahoo.com> Saturday, February 06, 2016 11:56 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Keala Ortiz 1128 Clio St Kaneohe, HI 96744

From: Sent: To: Subject: Kim Fallas <Klfallas@msn.com> Monday, February 08, 2016 7:58 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Kim Fallas 67180 Kanoena St. Waialua, HI 96791

From: Sent: To: Subject: Laura Mo <momo.modus@gmail.com> Sunday, February 07, 2016 5:37 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Laura Mo 3627 Likini St Honolulu, HI 96818

From: Sent: To: Subject: Leilani Lindsey-Kaapuni <lkaapuni@gmail.com> Monday, February 08, 2016 7:59 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerat ive vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Leilani Lindsey-Kaapuni Hilo Hilo, HI 96720

From: Sent: To: Subject: Leslie Wingate <lesliewingate7@gmail.com> Sunday, February 07, 2016 10:54 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Leslie Wingate PO Box 81 Pahoa, HI 96778

From: Sent: To: Subject: Levie Yamazaki-Gray <leviegray@yahoo.com> Sunday, February 07, 2016 3:23 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

As A retired School Psychologist and Licensed Mental Health Counselor, I have also read a number of studies showing possible links between pesticide exposure and autism and learning disabilities. I have read no convincing evidence showing this pesticide used to be safe. If you care about our keiki, the choice is clear. Even if you just care about the money society can save in the long run, on education efficiency and productivity and reduced health care costs this is a no-brainer.

I recently also read a related study that showed increased levels of glyphosate the chemical in Round- up in honey tested on Kauai. THis also suggests that these chemicals travel much more than their labels suggest. I do not believe that these companies are doing enough to manage the use of their products adequately to ensure public health and I think as a result, we need laws to protect us and especially our children!!!

Levie Yamazaki-Gray P.O. Box 1046 Kaunakakai, HI 96748

From: Sent: To: Subject: Luan Le <luanvanle@earthlink.net> Monday, February 08, 2016 5:36 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative ve getative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Luan Le 3411 Shea Ct Arlington, TX 76014

From: Sent: To: Subject: lyn Howe <lynhowe1946@yahoo.com> Saturday, February 06, 2016 1:55 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative v egetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

lyn Howe 14-3520 Government Beach Road Pahoa, HI 96778

From: Sent: To: Subject: Leilani Clark < hawaiiqh@gmail.com> Saturday, February 06, 2016 12:35 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Leilani Clark 87-370 Ka'ohe Mauka Pl Captain Cook, HI 96704

From: Sent: To: Subject: Lilinoe Smith <balihai7@hawaii.rr.com> Saturday, February 06, 2016 10:29 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Lilinoe Smith PO Box 414 Kalaheo, HI 96741

From: Sent: To: Subject: Maria A. Maitino <mmaitino@gmail.com> Sunday, February 07, 2016 9:01 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Maria A. Maitino PO Box 1097 Kilauea, HI 96754

From: Sent: To: Subject: Marilyn McAteer <Alohaoceanus@yahoo.com> Saturday, February 06, 2016 7:40 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Marilyn McAteer 4790 L Honoapiilani Road Lahaina, HI 96761

From: Sent: To: Subject: Martin Carvalho <Upcountrygardensnursery@yahoo.com> Sunday, February 07, 2016 11:04 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Martin Carvalho 75-5816 Lupa place Kailua kona, HI 96740

From: Sent: To: Subject: Mary Higgins < enlivenyourspirit@yahoo.com> Sunday, February 07, 2016 10:59 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zon es around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Mary Higgins pobox 791871 Paia, HI 96779

From: Sent: To: Subject: Mary Lane <marylane5093@yahoo.com> Monday, February 08, 2016 11:47 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Mary Lane PO Box 791294 Paia, HI 96779

From: Sent: To: Subject: Mary True <streamgirIII@yahoo.com> Saturday, February 06, 2016 2:22 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zone s around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Mary True PO BOX 1020 Pepeekeo, HI 96783

From: Sent: To: Subject: Michael Stauber <m_stauber@msn.com> Saturday, February 06, 2016 10:29 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Michael Stauber PO Box 1656 Koloa, HI 96756

From: Sent: To: Subject: Megan Blazak <Mblazak@gmail.com> Saturday, February 06, 2016 9:42 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Megan Blazak 485 Waianuenue Ave #147K Hilo, HI 96720

From: Sent: To: Subject: Marylei Drake <konadrakes@hawaii.rr.com> Sunday, February 07, 2016 6:47 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by esta blishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Marylei Drake 76-277E. Royal Poinciana Pl. Kailua-Kona, HI 96740

From: Sent: To: Subject: Michele McKay <michele@downtoearth.org> Monday, February 08, 2016 9:33 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regen erative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Michele McKay 1307 NW Saginaw Honolulu, HI 97701

From: Sent: To: Subject: Michele Nihipali <nihipalim001@hawaii.rr.com> Sunday, February 07, 2016 2:44 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regene rative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Michele Nihipali 54-074 Kamehameha Hwy. # A Hauula, HI 96717

From: Sent: To: Subject: Mille Kohl

bcalmk@hawaiiantel.net>

Saturday, February 06, 2016 2:54 PM

AGRtestimony

In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Mille Kohl 844 Kokomo Rd. Haiku, HI 96708

From: Sent: To: Subject: Mindy Morizumi <mkmoriz@aol.com> Saturday, February 06, 2016 9:13 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Mindy Morizumi 1625 Aa Street Lahaina, HI 96761

From: Sent: To: Subject: Miranda Camp <Mauimiranda@hotmail.com> Saturday, February 06, 2016 5:19 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposur e to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Miranda Camp P.O. Box 1508 Kihei, HI 96753

From: Sent: To: Subject: Myrica Morningstar <myricabliss@gmail.com> Monday, February 08, 2016 8:29 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Myrica Morningstar PO Box 1019 Kilauea, HI 96754

From: Sent: To: Subject: Nadine Light <rnlight@yahoo.com> Saturday, February 06, 2016 2:57 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and re generative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Nadine Light 327 Kealahou Street Honolulu, HI 96825

From: Sent: To: Subject: Nan Story <nan.bill@hotmail.com> Saturday, February 06, 2016 3:10 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Nan Story 1566 Kekaulike Ave Kula, HI 96790

From: Sent: To: Subject: Nancy Seifers <nancyseifers@gmail.com> Saturday, February 06, 2016 2:21 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regene rative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Nancy Seifers Hghy 132 Pahoa, HI 96778

From: Sent: To: Subject: Nastassia Hill <nastassia_hill@yahoo.com> Monday, February 08, 2016 11:22 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regen erative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Nastassia Hill P. O. Box 383572 Waikoloa, HI 96738

From: Sent: To: Subject: Nichole Awong <nicki808cast@gmail.com> Monday, February 08, 2016 7:46 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative ve getative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Nichole Awong 911532 hapaiko street Ewa Beach, HI 96706
From: Sent: To: Subject: Nicole Carey <nicolehana629@yahoo.com> Sunday, February 07, 2016 8:25 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative veget ative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Nicole Carey 67-341 Kaliuna st. Waialua, HI 96791

From: Sent: To: Subject: Nicole Parlow <nikkiparlowevents@gmail.com> Monday, February 08, 2016 8:05 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Nicole Parlow 59-063 Hoalua St. Haleiwa, HI 96712

From: Sent: To: Subject: Noreen Dougherty <montessorihale@gmail.com> Saturday, February 06, 2016 5:25 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childho od pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Noreen Dougherty 4664 Apopo Rd Kapaa, HI 96746

From: Sent: To: Subject: Pat Gegen <psgegen@hotmail.com> Sunday, February 07, 2016 11:52 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Pat Gegen 4015 Waha Rd Kalaheo, HI 96741

From: Sent: To: Subject: Paula Cohen <Alohaphap@aol.com> Saturday, February 06, 2016 8:58 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Paula Cohen 3854 Ahonui PI. Princeville, HI 96722

From: Sent: To: Subject: peter risley <peterrisley47@gmail.com> Saturday, February 06, 2016 1:50 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

peter risley p.o. box 1272 kapaau, HI 96755

From: Sent: To: Subject: Pamela Wai'olena <pwaiolena@yahoo.com> Saturday, February 06, 2016 11:36 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regen erative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Pamela Wai'olena P.O. Box 6416 Kamuela, HI 96743

From: Sent: To: Subject: PAULINE MENA <Polina3733@aol.com> Monday, February 08, 2016 8:25 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regener ative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

PAULINE MENA 896 Paniolo Place Makawao, HI 96768

From: Sent: To: Subject: Pamela Kaye Blessum <onourpaths@yahoo.com> Monday, February 08, 2016 1:42 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Pamela Kaye Blessum POB 1940 Kihei, HI 96753

From: Sent: To: Subject: Pete Wilson <perhansahi@gmail.com> Sunday, February 07, 2016 10:14 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Pete Wilson 13-927 Kahukai Street Pahoa, HI 96778

From: Sent: To: Subject: Peter Kalawaia Moore <peterm@hawaii.edu> Sunday, February 07, 2016 7:35 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Peter Kalawaia Moore 1991 10th Avenue Honolulu, HI 96816

From: Sent: To: Subject: Rebecca Sydney <bexter@maui.net> Sunday, February 07, 2016 12:56 PM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native and regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Rebecca Sydney 980 Olinda Rd. Makawo, HI 96768

From: Sent: To: Subject: Rexann Dubie <dubieldesign@hotmail.com> Sunday, February 07, 2016 8:11 AM AGRtestimony In Support of HB 2564 being heard by AGR/EEP on 02-09-16 at 8:30 AM

I am writing to urge your strong support of HB 2564. This bill aims to protect Hawai'i's keiki from the impacts of largescale agricultural pesticide use by establishing a pilot program of native a nd regenerative vegetative buffer zones around five schools across the State.

I am deeply concerned with the effects of pesticide application and pesticide drift on our keiki health while at school. There are at least 27 schools in Hawai'i within a mile of commercial agricultural operations that apply large volumes of restricted-use pesticides. The American Academy of Pediatrics finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

It is critical that the state take action to reduce childhood pesticide exposure because toxic exposure to pesticides during fetal, neonatal, and infant life can disrupt critical developmental processes. Early life pesticide exposure has been linked to long-term health effects including cancer, decreased cognitive function, behavior problems, birth defects and other adverse birth outcomes, and asthma.

Our children suffer the most from the lack of sufficient precaution and regulation of pesticide use near schools. In addition to acting as a windbreak, vegetative buffer zones will provide habitats for critical native species and support soil, air, and water remediation. For these reasons, I urge you to support HB 2564 and protect our keiki. Thank you for your time.

Rexann Dubie 59-171 A Ke Nui Haleiwa, HI 96712