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**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Mahealani Jones  
24 Alae Street  
Hilo, HI 96720

## Testimony

### In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

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Malama 'Aina,

Lehua Kaulukukui  
68-1756 Puwalu St.  
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Waikoloa , HI 96738

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1720 Perry St.  
Honolulu, HI 96819

841-5011

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PO Box 12  
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PO Box 322  
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The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

isobel storch  
1105 DeVictor Place  
Pittsburgh, PA 15206-1704

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

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Malama 'Aina,

Scott Jarvis  
PO Box 1664  
Hanalei, HI 96714

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Malama 'Aina,

Chasity Cadaoas  
146 Ehilani St.  
Pukalani, HI 96768

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Malama 'Aina,

Curt Sumida  
41-1009 Kalaniana'ole Hwy  
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Waimanalo, HI 96795

783-2440

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Malama 'Aina,

Janet Codispoti  
RR-3 Box 1354  
Pahoa, HI 96778

Testimony  
In Support of Ban on GMO-Taro

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Malama 'Aina,

Shannon renee Rudolph  
P.O. Box 243  
P.O. 243  
Holualoa, HI 96725

808-322-6604

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The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Curt Sumida  
41-1009 Kalaniana'ole Hwy  
41-1009 Kalaniana'ole Hwy  
Waimanalo, HI 96795

783-2440

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

**-Taro Deserves the Best Available Science-**

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

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Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the world's only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

**-Community and Ethical Concerns about GMO-Taro-**

Cultivated throughout centuries to be abundantly grown on Hawaii's diverse agricultural lands, taro is the sacred foundation of our unique local agriculture, society, traditions and family structure. Genetic modification of taro is an affront to the sacred Hawaiian tradition that respects the taro plant as a family member, an older brother to humanity. This family tradition is rooted in honoring the relationship of mankind with the very plants we depend on for healthy nourishment, and establishes a unique genealogical connection between taro and the Hawaiian people. The wisdom of such healthy community values must be encouraged, not disrespected or desecrated. Despite the unique and utmost importance of this plant to our community, GMO-taro has been developed without any

informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

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Malama 'Aina,

Tristen Wanke  
P.O. Box # 2  
makawao, HI 96768

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join my community in Hana, Maui , Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

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**-Community and Ethical Concerns about GMO-Taro-**

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Malama 'Aina,

Leimamo Lind  
1202 S Washington st.  
#621C  
Alexandria, VA 22314

Testimony  
In Support of Ban on GMO-Taro

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Malama 'Aina,

Miranda Camp  
29 Kuponu St  
Paia, HI 96779

## Testimony

### In Support of Ban on GMO-Taro

Aloha mai kakou

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Malama 'Aina,

Alison Hartle  
2646 Pamoia Road  
2646 Pamoia Road  
Honolulu, HI 96822

## Testimony

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Malama 'Aina,

Janice palma-glennie  
Pobox 4849  
Kailua-kona, HI 967454849

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**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

**-Legal and Governance Concerns about Preemption Legislation-**

In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to tamper with the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Keoki Kahumoku  
358 ululani street  
Hilo, HI 96720

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

-Taro Deserves the Best Available Science-

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

-Health and Environmental Safety Concerns about GMO-Taro-

Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the world's only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

-Community and Ethical Concerns about GMO-Taro-

Cultivated throughout centuries to be abundantly grown on Hawaii's diverse agricultural lands, taro is the sacred foundation of our unique local agriculture, society, traditions and family structure. Genetic modification of taro is an affront to the sacred Hawaiian tradition that respects the taro plant as a family member, an older brother to humanity. This family tradition is rooted in honoring the relationship of mankind with the very plants we depend on for healthy nourishment, and establishes a unique genealogical connection between taro and the Hawaiian people. The wisdom of such healthy community values must be encouraged, not disrespected or desecrated. Despite the unique and utmost importance of this plant to our community, GMO-taro has been developed without any

informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

**-Legal and Governance Concerns about Preemption Legislation-**

In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Leslie Yee Hoy  
1305 Hele  
Kailua, HI 96734

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

**-Taro Deserves the Best Available Science-**

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

**-Health and Environmental Safety Concerns about GMO-Taro-**

Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the world's only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

**-Community and Ethical Concerns about GMO-Taro-**

Cultivated throughout centuries to be abundantly grown on Hawaii's diverse agricultural lands, taro is the sacred foundation of our unique local agriculture, society, traditions and family structure. Genetic modification of taro is an affront to the sacred Hawaiian tradition that respects the taro plant as a family member, an older brother to humanity. This family tradition is rooted in honoring the relationship of mankind with the very plants we depend on for healthy nourishment, and establishes a unique genealogical connection between taro and the Hawaiian people. The wisdom of such healthy community values must be encouraged, not disrespected or desecrated. Despite the unique and utmost importance of this plant to our community, GMO-taro has been developed without any

informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

**-Legal and Governance Concerns about Preemption Legislation-**

In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Kathy-Lyn Allen  
2702 High Street  
Pueblo, CO 81003

## Testimony

### In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of ALL plants and animal including papaya and all taro varieties, by supporting a ban on all GMO and GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

#### -Taro Deserves the Best Available Science-

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

#### -Health and Environmental Safety Concerns about GMO-Taro-

Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the world's only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

#### -Community and Ethical Concerns about GMO-Taro-

Cultivated throughout centuries to be abundantly grown on Hawaii's diverse agricultural lands, taro is the sacred foundation of our unique local agriculture, society, traditions and family structure. Genetic modification of taro is an affront to the sacred Hawaiian tradition that respects the taro plant as a family member, an older brother to humanity. This family tradition is rooted in honoring the relationship of mankind with the very plants we depend on for healthy nourishment, and establishes a unique genealogical connection between taro and the Hawaiian people. The wisdom of such healthy community values must be encouraged, not disrespected or desecrated. Despite the unique

and utmost importance of this plant to our community, GMO-taro has been developed without any informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

**-Legal and Governance Concerns about Preemption Legislation-**

In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Sara McCay  
62-2219 Ouli Street  
Kamuela, HI 96743

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

**-Taro Deserves the Best Available Science-**

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

**-Health and Environmental Safety Concerns about GMO-Taro-**

Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the worlds only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

**-Community and Ethical Concerns about GMO-Taro-**

Cultivated throughout centuries to be abundantly grown on Hawaii's diverse agricultural lands, taro is the sacred foundation of our unique local agriculture, society, traditions and family structure. Genetic modification of taro is an affront to the sacred Hawaiian tradition that respects the taro plant as a family member, an older brother to humanity. This family tradition is rooted in honoring the relationship of mankind with the very plants we depend on for healthy nourishment, and establishes an unique genealogical connection between taro and the Hawaiian people. The wisdom of such healthy community values must be encouraged, not disrespected or desecrated. Despite the unique and utmost importance of this plant to our community, GMO-taro has been developed without any

informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

**-Legal and Governance Concerns about Preemption Legislation-**

In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Roger Harris  
RR 2, Box 3902  
Pahoa, HI 96778

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

-Taro Deserves the Best Available Science-

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

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As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

chaunnel salmon  
84-849 Fricke St.  
Waianae, HI 96792

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

**-Taro Deserves the Best Available Science-**

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**-Health and Environmental Safety Concerns about GMO-Taro-**

Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the world's only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

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**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Bobbie Alicen  
HCR 2, Box 6824  
Kea'au, HI 96749

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

-Taro Deserves the Best Available Science-

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

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Cultivated throughout centuries to be abundantly grown on Hawaii's diverse agricultural lands, taro is the sacred foundation of our unique local agriculture, society, traditions and family structure. Genetic modification of taro is an affront to the sacred Hawaiian tradition that respects the taro plant as a family member, an older brother to humanity. This family tradition is rooted in honoring the relationship of mankind with the very plants we depend on for healthy nourishment, and establishes an unique genealogical connection between taro and the Hawaiian people. The wisdom of such healthy community values must be encouraged, not disrespected or desecrated. Despite the unique and utmost importance of this plant to our community, GMO-taro has been developed without any

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Malama 'Aina,

Tracey Schavone  
POBox 676  
Anahola, HI 96703

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Malama 'Aina,

Mahealani Carvalho  
P.O. Box 612  
Volcano, HI 96785

Testimony  
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Malama 'Aina,

Alana Bryant  
2746 Kahawai St.  
Honolulu, HI 96822

429-0479

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Malama 'Aina,

Mara L. B. Chang  
45-251 Kulauli Street  
Kāne`ohe, HI 96744

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I strongly support every effort to uphold the public's right to access the shoreline. Current protections for beach access are threatened by poor enforcement. Please pass S.B 1088/H.B. 971 and help improve enforcement of the public's longstanding right to beach access.

**PUBLIC ACCESS TO THE BEACH IS CRUCIAL TO HAWAII'S FUTURE**

For generations, the people of Hawaii have lived and thrived by the beach. Our unique beaches are a source of health and revitalization for everyone who considers Hawaii home. Ensuring access to the beach is a basic element of maintaining a high quality of life for Hawaii's residents.

Many Native Hawaiian cultural practitioners actively visit the beach at dusk, dawn, and throughout the day as part of traditional and customary practices, including surfing, gathering, and religious observances. As access to the beach becomes more difficult, so too will it become more difficult to perpetuate our unique Hawaiian culture.

Moreover, Hawaii's economy earns more than \$700 million a year from ocean-based recreational activities. According to Hawaii's comprehensive "Ocean Resources Management Plan, 80% of all visitors to Hawaii engage in shore-based activities that generates over \$360 million every year. This has spawned over 1,000 ocean-related tourism companies. Impeding access to the beach undermines this vital, sustainable aspect of our islands economy.

**PUBLIC ACCESS TO THE SHORELINE IS IN JEOPARDY**

Although Hawaii's Supreme Court has repeatedly upheld the public's right to access the shoreline and inland recreational areas based on our unique political and cultural history as an independent nation, it is increasingly difficult for people to actually use those rights. Beach-front developments, military installations, private gates, no trespassing signs, and high parking fees all stand where paths once invited people to the shore.

Conflicts between beach-front property owners and the general public are on the rise. Major protests were held throughout the islands last year to demonstrate residents' frustration with the lack of enforcement of shoreline protections - including public rights-of-way and shoreline setbacks. These conflicts can only be expected to grow, as Hawaii's population is anticipated to expand by another 30% over the next 20 years.

Adding to the pressures of shoreline development is the loss of beach front to erosion. At least 17 miles of beach on Oahu and 8 miles of beach on Maui have been lost to shoreline armoring and sea level rise. According to the State of the Beach Report published annually by the Surfrider Foundation, beaches in front of seawalls are 50-70% narrower than natural beaches.

## SUPPORT IMPROVED ENFORCEMENT OF EXISTING PROTECTIONS

This is why I strongly urge you to please pass S.B. 1088/H.B. 971. This bill improves enforcement of existing shoreline access protections currently provided for under Hawaii Revised Statutes sec. 115. This law was passed in 1974 because legislators recognized that "development pressures were undermining the public's right to access the shoreline and inland recreational areas." Unfortunately, today those pressures have only gotten stronger, while the ability of the Department of Land and Natural Resources to enforce these rights has gotten weaker. Passage of this bill will help to fulfill the public's right to beach access, while lessening the burden on state enforcement officers.

Mahalo for your support,

Robert Wagner  
3100 Sweetwater Rd  
Apt. 3112  
Lawrenceville, GA 30044

Testimony  
In Support of Ban on GMO-Taro

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Malama 'Aina,

Ralph Theron davis  
57581 Alder Creek Rd  
Scappoose, OR 97056

503-246-7898

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GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

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informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

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The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Ron Dixon  
po box 223403  
Princeville, HI 96722

## Testimony

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Aloha mai kakou

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Malama 'Aina,

Shawn White  
PO Box 2502  
Honolulu, HI 96804

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Malama 'Aina,

Luella Crutcher  
P.O. Box 928  
Pahoa, HI 96778

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Malama 'Aina,

robert mceldowney  
po box 450  
laupahoehoe, HI 96764

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Malama 'Aina,

Forest Shomer  
PO Box 639  
Port Townsend, WA 98368

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Jason Ito  
5-5435 Kuhio HWY  
Hanalei, HI 96714

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GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

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Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the worlds only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

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Cultivated throughout centuries to be abundantly grown on Hawaii's diverse agricultural lands, taro is the sacred foundation of our unique local agriculture, society, traditions and family structure. Genetic modification of taro is an affront to the sacred Hawaiian tradition that respects the taro plant as a family member, an older brother to humanity. This family tradition is rooted in honoring the relationship of mankind with the very plants we depend on for healthy nourishment, and establishes an unique genealogical connection between taro and the Hawaiian people. The wisdom of such healthy community values must be encouraged, not disrespected or desecrated. Despite the unique and utmost importance of this plant to our community, GMO-taro has been developed without any

informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Mark S. Alapaki Luke (kalo planter in Kahana Valley)

Kumu (Teacher)

University of Hawai'i at M?noa (Hawaiian Studies) & Honolulu Community College (Hawaiian Studies & Geography)

Mark Alapaki Luke

P.O. Box 11085

103A

Honolulu, HI 96828



Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

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Malama 'Aina,

Frederika E Ebel  
PO Box 701  
Flemington, NJ 08822

908-391-0949

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In Support of Ban on GMO-Taro

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Malama 'Aina,

normand dufresne  
p.o. box 587  
pahoa, HI 96778

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As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Corey Ann Lewin  
923 N. San Vicente Blvd #7  
West Hollywood, CA 90069

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

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Malama 'Aina,

Richard Powers  
P.O. Box244  
Naalehu, HI 96772

Testimony  
In Support of Ban on GMO-Taro

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Malama 'Aina,

robin Torquati  
PO Box 1039  
Kilauea, HI 96754

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

For the third year in a row I implore you to ban genetic modification of our state plant, kalo. Thank you,  
Beryl Blaich

Beryl Blaich  
PO Box 1434  
Kilauea, HI 96754

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

**-Taro Deserves the Best Available Science-**

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

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informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

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The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Bobbi Lempert  
PO Box 791881  
Paia, HI 96779

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Zachary Klaja  
3230 Eastlake Ave E #204  
Seattle, WA 98102

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1505 Kewalo Street #301A  
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Malama 'Aina,

Lorraine Kohn  
74-873 Hauoli Place  
Kailua Kona 96740  
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P.O. Box 143  
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GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

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informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Elisha Belmont  
10491 Cunningham  
Westminster, CA 92683

## Testimony

### In Support of Ban on GMO-Taro

Aloha mai kakou

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Malama 'Aina,

Adele Henkel  
POB 4344  
Kailua Kona, HI 96745

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Malama 'Aina,

Momi Kaikala  
285 Liliuokalani Street  
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Malama 'Aina,

Rebecca Miller  
6020 Koolau Rd.  
Anahola, HI 96703

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Aloha mai kakou

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66 Amauulu Rd. #4  
PMD 432, 200 Kaneolaehua Ave.  
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GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

#### -Health and Environmental Safety Concerns about GMO-Taro-

Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the worlds only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

#### -Community and Ethical Concerns about GMO-Taro-

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informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Gary Wiseman  
515 Pualani St.  
Wailuku, HI 96793

## Testimony

### In Support of Ban on GMO-Taro

Aloha mai kakou

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Malama 'Aina,

suzanne garrett  
2023 lime st. #J  
honolulu, HI 96826

Testimony  
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Testimony  
In Support of Ban on GMO-Taro

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Mahalo,

Jeff Haun

Jeff Haun  
PO Box 248  
Hakalau, HI 96710

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Malama 'Aina,

Denise Lytle  
73 Poplar St.  
Fords, NJ 08863

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

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Malama 'Aina,

Katie Winchell  
16942 Lynn St., Unit E  
Huntington Beach, CA 92649

## Testimony

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Malama 'Aina,

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476 Cane St. #8  
Larkspur, CA 94939

Testimony  
In Support of Ban on GMO-Taro

Aloha mai kakou

I join communities across Hawaii in rejecting the genetic modification of all taro varieties, by supporting a ban on GMO-taro. I am deeply concerned about the unknown health risks, irreversible threats to native ecosystems, cultural disrespect, patenting and bioprospecting of Hawaii's natural resources and potential harms to our local farming economy that are associated with GMO-taro.

-Taro Deserves the Best Available Science-

GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

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informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

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**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

CHRISTINE Kauahikaua  
PO BOX 50  
WAIMANALO, HI 96795

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Miguel Godinez  
P.O. Box 508  
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11891 Lake Blvd  
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3931 Pili Pl  
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GMO-taro is claimed to potentially reduce one type of taro disease in one variety of taro by creating irreversible, unnatural genetic mutations whose safety to consumers and the environment is not scientifically proven. GMO-taro has no proven benefits to taro farmers or consumers and is not the best available science needed to safely perpetuate taro farming and protect consumers in Hawaii. Better and safer options exist. Long-term scientific studies and farming practices throughout the Pacific have resulted in proven scientific techniques to expand the local taro industry, protect unique Hawaiian taro varieties, farmlands and watersheds-- without GMOs. These community-accepted practices include: organically improving soil health, establishing appropriate water-flow standards to prevent disease and pests, stopping imports of diseased taro and pests into Hawaii, and growing many traditional varieties of natural taro with different natural disease resistance. Being that safer science exists, there is no need or demand for experimental GMO-taro from local taro farmers or consumers.

#### -Health and Environmental Safety Concerns about GMO-Taro-

Taro is a nutritious food crop, especially cherished as a baby food and staple dish in Hawaii for centuries; and around the world as an important medicinal food for diabetes, cancer, autism and serious food allergies. Taro is the world's only hypo-allergenic, or allergy-free, carbohydrate. GMO-taro, on the other hand, is not the same as natural taro. GMO-taro has never been in the human food supply before, and has NOT been scientifically tested on humans to prove that it is safe to eat. Moreover, the unnatural genetic mutations of GMO-taro can never be guaranteed to be hypo-allergenic, thus threatening consumers of this uniquely important medicinal food source. In fact, numerous scientific studies on laboratory animals show that GMOs can cause toxic, allergic, and even deadly reactions. Unnatural gene mutations introduced through GMO-taro may harm insects, birds, fish, and soil health. Risks and damages to Hawaii's people and lands could be irreversible.

#### -Community and Ethical Concerns about GMO-Taro-

Cultivated throughout centuries to be abundantly grown on Hawaii's diverse agricultural lands, taro is the sacred foundation of our unique local agriculture, society, traditions and family structure. Genetic modification of taro is an affront to the sacred Hawaiian tradition that respects the taro plant as a family member, an older brother to humanity. This family tradition is rooted in honoring the relationship of mankind with the very plants we depend on for healthy nourishment, and establishes a unique genealogical connection between taro and the Hawaiian people. The wisdom of such healthy community values must be encouraged, not disrespected or desecrated. Despite the unique and utmost importance of this plant to our community, GMO-taro has been developed without any

informed community consent, raising serious ethical science concerns. Businesses and researchers in Hawaii should encourage informed community consent and review, not avoid oversight and involvement from the very communities most effected by their activities.

**-Economic and Bioprospecting Concerns about GMO-Taro-**

The right to grow taro naturally and traditionally belongs to the public, and should never be owned by a corporation or university. Private patents and control of our public food resources would cripple our food security, taro economy and violate our inherent public rights. GMO-taro experiments and patents cannot help taro farmers with the real problems that they face and will only endanger the valuable traditional biodiversity of taro in Hawaii.

**-Legal and Governance Concerns about Preemption Legislation-**

In "exchange" for a ban on GMO-taro, the biotech/GMO industry may attempt to turn our community's intentions to protect taro into unfair "preemption" legislation which would prohibit state or county oversight, and public notice of all other GMOs and biotech activities in Hawaii. We do not support any such attempts to preempt legitimate local government regulations to protect public health. Preempting local efforts to protect public health raises serious legal, ethical, and scientific concerns-- our public and environmental safety, as well as our local-governance authority, must be prioritized over private investment concerns and high-risk experiments.

**-Help Taro, Don't Hurt Taro!-**

Agricultural science has proven that the taro will be as healthy as the land in which it is grown and the care with which it is shown. There is no actual need to permanently change the taro plant's natural genetic structure nor patent the plant for private profit in order to protect the local taro industry. Rather, farmers, scientists and decision makers must work to solve the broad resource management problems that face taro farming. Lack of meaningful support to address the drastically increasing challenges from invasive diseases, pests, excessive and illegal diversions of water, and operating costs, has led to a decrease in taro farming and a taro shortage in Hawaii. With appropriate political, scientific and community support, taro will once again be a primary resource for Hawaii's food security, contributing significantly to a healthy local diet and economy. GMO-taro and patents, however, could destroy the safety and sanctity of natural taro as an important allergy-free food, cultural resource and local agricultural industry in Hawaii.

As a strong supporter of taro farming in Hawaii, I ask you to protect the security of the health of natural taro and the local taro industry by establishing a ban on GMO-taro.

Malama 'Aina,

Helen anne Schonwaller  
P.O. Box 791082  
Haiku, HI 96708

## Testimony

### In Support of Ban on GMO-Taro

Aloha mai kakou

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Malama 'Aina,

Mary Lu Kelley  
P.O. Box 670  
P.O. Box 670  
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