



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

TESTIMONY OF RUSSELL S. KOKUBUN
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON
CONSUMER PROTECTION & COMMERCE

THURSDAY, FEBRUARY 13, 2013
2:30 P.M.
ROOM 325

HOUSE BILL NO. 174
RELATING TO FOOD LABELING

Chairperson McKelvey and Members of the Committee:

Thank you for the opportunity to testify on House Bill No. 174. The purpose of this bill is to require all imported genetically engineered produce sold in Hawaii to be labeled as "genetically engineered" and to also require disclosure of genetic engineering and compliance with recommendations of the Hawaii Invasive Species Council upon import. The Department strongly opposes this measure.

Following the reductions-in-force in 2009, the Department is challenged with meeting its existing statutory mandates. Furthermore, the Department has concerns with the language as written as it appears to conflict with current quarantine enforcement methods.

Thank you for this opportunity to present our testimony.



kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 2:37 PM
To: CPCtestimony
Cc: hilomassage@mac.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Wil McClaren	Individual	Support	No

Comments: Even though I think it's weak that this will only cover labeling imported produce (seriously?!) at least it's something. toss some crumbs to the lowly commoners of Hawai'i by passing this GMO labeling bill. thanks

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 2:50 PM
To: CPCtestimony
Cc: coakes@hawaii.edu
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Christopher Oakes	Individual	Support	No

Comments: NO MORE...MUST HAVE LABELING. IF NOT ORGANIC THEN GOTTA GO

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 2:52 PM
To: CPCtestimony
Cc: eebrowni@hawaii.edu
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Eliza Browning	Individual	Support	No

Comments: I support house bill 174 with no amendments. Also I will refuse to vote for my representative again if he/she supports this bill.

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Sent: Tuesday, February 12, 2013 2:54 PM
To: CPCtestimony
Cc: sergioa@hawaii.edu
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: I support HB174.

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Sent: Tuesday, February 12, 2013 2:59 PM
To: CPCtestimony
Cc: rob@surfbeyond.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Barreca	Individual	Support	No

Comments: Consumers have a right to know if the food they are buying are genetically engineered. GMOs potentially pose significant health risks, but today consumers do not have the power to choose to avoid purchasing them.

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Sent: Tuesday, February 12, 2013 3:02 PM
To: CPCtestimony
Cc: mmaitino@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: The effective date of this bill needs to be changed to a more realistic date like January 1, 2014. Thank you.

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To: CPCtestimony
Cc: bkdl@hotmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: Aloha CPC Committee: if food that has been genetically modified is not market-driven, we are being force-fed. Please label GMOs. We have a right to know.

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 3:32 PM
To: CPCtestimony
Cc: blairadactyl@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Blair Keiter	Individual	Support	No

Comments: I strongly support the passage of HB 174. Transparency in all products, especially those that are INGESTED is CRUCIAL to the well being of our population and to the very idea of capitalism and democracy. Consciously supporting the products and services we believe in with our dollars can only be done when consumers can find out exactly what they are supporting.

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 3:43 PM
To: CPCtestimony
Cc: mmatsuda@hawaii.edu
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Mari Matsuda	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 3:44 PM
To: CPCtestimony
Cc: serena9@hawaii.edu
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Serena Podish	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 3:46 PM
To: CPCtestimony
Cc: warrenmcfb@hotmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

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Submitted By	Organization	Testifier Position	Present at Hearing
Warren Watanabe	MCFB	Oppose	No

Comments:

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 4:17 PM
To: CPCtestimony
Cc: maj6771@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

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Submitted By	Organization	Testifier Position	Present at Hearing
Jeremy A. Mills	Individual	Comments Only	No

Comments: As a new member of the county of Kauai, I am fully supporting this bill to go through as we need proper labeling of all GE products as well as Invasives to the island communities. As an organic non-gmo farmer, it is our right to know what is being put into our food for our own safety. As you know many foreign nations have already opposed GE fully or at the minimum require them to all be labeled. This needs to happen now before it is far too late. Mahalo!

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 3:59 PM
To: CPCtestimony
Cc: judie@aloha.net
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Judie Hoepfner	Individual	Support	No

Comments: Knowing what is in the food we eat is critical to our health. If GMO's are as great as the chemical companies say, then you'd think they would also want GMO labeling!

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Sent: Tuesday, February 12, 2013 4:00 PM
To: CPCtestimony
Cc: evie.yeung@gmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Eve Yeung	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 4:01 PM
To: CPCtestimony
Cc: lauren41980@gmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments:

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 4:17 PM
To: CPCtestimony
Cc: shannonkona@gmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Support	No

Comments:

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To: CPCtestimony
Cc: shannonkona@gmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
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To: CPCtestimony
Cc: mn4e@me.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Marin Donohue	Individual	Oppose	No

Comments: Who pays for this- ultimately the consumer. And what happens when other states think this is a good idea. and the recipricate. We label our papaya, that's what! Why are you doing this and why now. It's been around for years and we don't have three eyes. Labels are for nutrition and allergens. You say you are friends to the small farmer, prove it.

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 4:47 PM
To: CPCtestimony
Cc: haha@hawaii.rr.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: I support this bill which will require all imported genetically engineered fresh produce sold in Hawaii to be labeled as "genetically engineered". It is in EVERYONE'S best interest to require disclosure of genetic engineering. Mahalo

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 4:47 PM
To: CPCtestimony
Cc: nancylevis@hotmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
nancy levis	Individual	Support	No

Comments: gmo food gives the inside of my mouth painful sores

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 5:00 PM
To: CPCtestimony
Cc: christiaan.mitchell@gmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Christiaan Mitchell	Individual	Support	No

Comments:

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Sent: Tuesday, February 12, 2013 5:33 PM
To: CPCtestimony
Cc: lance.duncan@live.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Lance Duncan	Individual	Support	No

Comments: I fully support the labeling of GMO products and products containing GMO ingredients as the public's right to know what they are consuming and make educated, appropriate, personal choices. Thank you for the opportunity to testify. Lance Duncan Paho, HI

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**Testimony to the House Committee on Consumer Protection and Commerce
Wednesday, February 13, 2013 at 2:30 P.M.
Conference Room 325, State Capitol**

RE: HOUSE BILL 174 HD1, RELATING TO FOOD LABELING

Chair McKelvey, Vice Chair Kawakami, and Members of the Committee:

The Chamber of Commerce of Hawaii **opposes** HB 174 HD 1 Relating to Food Labeling.

This would be another additional cost on businesses and consumers. Also, the administrative burden and costs to differentiate and research raw and other food material would be substantial. We also believe that if we add costs and regulation on out of state produce, other states may react and do the same to Hawaii as was done with the cargo fee by the state of California.

The Chamber understands consumer information is important. We believe that jurisdiction for these matters are generally handled by the Food and Drug Administration and are in line with generally accepted scientific principles. The American Medical Association (AMA), World Health Organization, National Academy of Sciences, and the European Union have thoroughly examined the evidence and found that consuming genetically engineered foods are no riskier than consuming conventionally grown foods.

The Chamber is the largest business organization in Hawaii, representing more than 1,000 businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of its members, which employ more than 200,000 individuals, to improve the state's economic climate and to foster positive action on issues of common concern.

Thank you for this opportunity to express our views.

kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 5:56 PM
To: CPCtestimony
Cc: landloper@mac.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Jeff Vesci	Individual	Support	No

Comments: I deserve the right to know if my food is GMO and make the choice to eat it or not.

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KOKUA KALIHI VALLEY

(Comprehensive Family Services)

2239 North School Street, Honolulu, HI 96819

Tel. 791-9400 Fax 848-0979

2/11/2013

COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Rep. Angus L.K. McKelvey, Chair

Rep. Derek S.K. Kawakami, Vice Chair

Dear Representatives:

I am writing in support of the GMO Labeling Bill HB174HD1.

As a scientist and physician and father of two children, I believe the operating principle here has to be that we should always err on the side of safety. Have GMO's conclusively been proven to cause illness? I think the answer is no, not conclusively. There remains considerable controversy in the research, although recent findings make me very nervous that GMO's are not as safe as we have been led to believe. So what do we do when we don't have all the answers? The prudent answer has to be "act with caution" and that means letting consumers decide for themselves if the potential risks of GMO foods outweigh the purported benefits. Consumers can't do that unless they know what is in the food they are eating.

I ask for your support of this important legislation.

Sincerely,

Dr. David Derauf, Executive Director
Kokua Kalihi Valley (CFS)

kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 6:10 PM
To: CPCtestimony
Cc: carlyi@hawaii.edu
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: As an American citizen and a health addict, I believe it's important to know what's in the products we purchase at the store. We have a RIGHT to know everything that's included in the good, whether GMO or not. I mean, why not label it if it contains GMO products?! Is there something to hide?? That's the only reason I see why this bill has not passed...because companies are trying to hide from their consumers what they used to make it. Are these companies scared that their items won't sell?? If so, they know something is WRONG and that they shouldn't be using GMO!!!! LABEL GMO!!!!

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To: CPCtestimony
Cc: Nekokichigai@aol.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

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Submitted By	Organization	Testifier Position	Present at Hearing
Suzanne Watanabe	Individual	Support	No

Comments: I strongly support HB174 - labeling of genetically modified foods/produce. As consumers, we have the right to know what is in the food we are eating, and can thereby make sound and intelligent choices. There has been some research done in the past years which show a strong link between the consumption of GMO foods to certain cancers. As a member of Kaiser Permanente, I received a newsletter from our health insurer in November 2012 which advised all of their health plan members to avoid the consumption of genetically modified/engineered foods. If our health insurer is telling its members this, then there must be strong evidence to show the link between consuming GMO foods to serious health problems, and as a Kaiser member, I am adhering to their advice.

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 6:21 PM
To: CPCtestimony
Cc: mkelley323@gmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

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

Comments:

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Sent: Tuesday, February 12, 2013 7:02 PM
To: CPCtestimony
Cc: shan0815@hotmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

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Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Nohealani Bucasas	Individual	Support	No

Comments: I support House Bill 174 which would require all genetically engineered produce to be labeled. With very little testing done to monitor any health risks that may arise from the consumption of genetically engineered produce, I believe that consumers should be able to choose whether or not they want to consume genetically engineered produce. Without labeling, consumers are not able to make these choices. Please support HB 174 and allow people to choose what they consume. Mahalo

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Aloha. My name is Karly Williams. And I am testifying in strong support of HB 174 with NO amendments. The original bill was to label ALL gmo whole foods, raw foods, and processed foods with genetically engineered material. Although it is also nice to know which imported raw foods are genetically modified, we NEED labeling on the processed foods even more. People DESERVE the right to know what exactly is in the things they eat and feed their children, and you OWE them that protection and security. I don't have to stress this because you already know that it is your duty as a leader of Hawaii to choose right, do right BY THE PEOPLE [NOT THE CORPORATION!!], do right by this beautiful god-given paradise 'aina, and to act with integrity. The things these chemical companies are doing are NOT pono. So many studies [which keep popping up more and more everyday] are already showing their negative and harmful generational effects upon the second and third generations of test subjects, including sterility, cancer, infertility, obesity, and diabetes. Who knows what will happen to our children. Please do this for them. Acting with integrity means to do the right thing when no one is looking. Here is your golden opportunity to act with love/unity CONSCIOUSNESS AND TO DO THE RIGHT THING when MILLIONS UPON MILLIONS aren't aware, and not looking. Mahalo



Hawaii Farm Bureau
F E D E R A T I O N

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February 13, 2013

HEARING BEFORE THE
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

TESTIMONY ON HB 174, HD1
RELATING TO FOOD LABELING

Room 325
2:30 PM

Chair McKelvey, Vice Chair Kawakami, and Members of the Committee:

I am Dean Okimoto, President of the Hawaii Farm Bureau Federation (HFBF). Organized since 1948, the HFBF is comprised of 1,950 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate, and advance the social, economic, and educational interest of our diverse agricultural community.

HFBF respectfully requests that you oppose HB 174, HD1 related to food labeling.

For many years, HFBF has come before the Legislature and advocated for keeping food labeling requirements at the federal level from a regulatory perspective. HFBF believes in the science that is guiding the FDA regarding the nutrition facts and ingredients information contained on US food labels. HFBF is confident in the FDA's ability to keep our food safe and believes that additional state or local food labeling requirements 1) will confuse consumers, 2) will be costly to implement, 3) will be very likely impossible to effectively enforce, and 4) will likely lead to increased local food costs for Hawaii consumers.

HFBF understands why telling food producers, food distributors, and grocery chains that "we the people" have a right to know what's in our food is so appealing. But the idea is problematic for several reasons, the least of which being that labels for GMO foods imply that there's something wrong with them, when according to the American Medical Association (AMA), World Health Organization, and National Academy of Science, there really isn't.

Also troubling is the fact that misleading the public about science often backfires. Inaccurate sensational political advocacy masquerading as science teaches the public to distrust scientists and wrongly doubt their conclusions. The same applies to teaching people to fear GMO foods without cause.

We humbly request that you oppose this measure. Thank you for this opportunity to provide our opinion on this important matter.

kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 8:00 PM
To: CPCtestimony
Cc: scoleman34@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: My name is Stuart Coleman, and I am an environmental coordinator and a writer in the McCully area. I am writing to express strong support for HB174. Producers need to label GMO produce because Hawaii's people deserve the right to know what they are buying and to choose what they are eating. Thanks for your consideration.

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Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803
808.538.6616 hawaii.chapter@sierraclub.org

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 13, 2013, 2:30 P.M.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 174, HD1 WITH A PROPOSED AMENDMENT

Chair Wooley and members of the Committee:

The Sierra Club, Hawaii Chapter, with over 10,000 dues paying members and supporters statewide, respectfully *supports* HB 1407. This measure requires labeling of all imported genetically engineered fresh produce sold in Hawaii.

Genetically modifying organisms—the practice of splicing DNA from bacteria, viruses and other organisms into plants to lend them certain traits, like resistance to chemical weedkillers—poses extreme risks to our common environment. Manipulation of genetic material by inserting bacteria, plant, animal, and human genes into food products is a radical departure from traditional breeding techniques and represents an unprecedented break with natural processes.

The public is entitled to know more about these potential risks. The public is entitled to be able to make informed decisions about what products they purchase and eat. This may also impact the production of GMO products -- if no one purchases them, will there be a demand to continue growing them? An informed public is able to make informed decisions. To adequately protect the environment and the public health, this bill should be passed.

Proposed amendment. We note that the limitation on food imported into Hawaii may create constitutional issues, and would request this Committee amend the language to apply to all fresh produce sold in Hawaii.

Mahalo for the opportunity to testify.

kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 8:58 PM
To: CPCtestimony
Cc: msgingerbray@yahoo.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ginger Bray	Individual	Support	No

Comments: I strongly support this bill to label all genetically modified produce in the State of Hawaii.

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Support HB174, HD1
Hawaii House of Representatives
Consumer Protection Committee Members

February 13, 2013 2:30 PM

Aloha Honorable Consumer Protection Committee Representatives,

We are a non-profit organization dedicated to environmental awareness, primarily focused on education about the impacts of genetically engineered crop production and industry. Our organization represents over 2,100 members and supporters predominantly in Hawaii and we are in strong support of HB174, HD1 for GMO food labeling on the following grounds.

The people of Hawaii are seeking legislation and protection and identification for GMO products. We are constituents and citizens, secretaries, models, teachers, farmers, parents, students, chefs, doctors, lawyers, therapists, promoters, dancers, surfers, entrepreneurs and community advocates. We are not lobbyists and multi-national corporations, or heavily invested in chemical, industrialized genetically engineered farming, for those are generally the only representatives who come to defending the biotech agenda; Those who are paid by the companies profiting from our slow destruction.

We however are highly active in our community, and dedicated to raising awareness and of course, we are your voters. Over 1,000 Hawaii people marched on the State Capitol on opening day to a rally of perhaps 1,000 more, demanding the end of GMO's and the labeling of what does exist, the abolishing of the PLDC and Hawaiian sovereignty restoration. Your constituents and people across the world are clearly calling for identification and regulation of GMO products.

GMO products have been linked to serious health risks including infertility, sterility, endocrine disruption, cancerous

tumors, organ enlargement, problems with protein and cholesterol synthesis, intestinal dysregulation and undesirable genetic mutations, these foods that MUST be labeled. Genetically engineered product makers and food manufacturers are reliant on the fact that we can not detect their presence in food, they are committed to deception and refusing to identify their products.

Companies that produce genetically engineered products and foodstuff collected themselves in just a matter of months to spend over \$45 million dollars fighting GMO labeling in California's Proposition 37 alone. They can afford to label the food.

Recently major food manufacturers Pepsi, ConAgra and other funders of No to Prop 37, which consisted of biotech, GMO companies and food manufacturers who funded a campaign against food labeling transparency met with the FDA to discuss the labeling of genetically modified foods. The specific companies who funneled money to fight the public right to know if their food has GMO ingredients, have been receiving major consumer backlash. They who spent millions against food ingredient transparency are feeling the nationwide boycotts of their products and relentless exposures and viral campaigns within social media networks. It is time to address GMO food labeling.

Consumers want GMO'S LABELED. Consumers want to know, who is using GMO food. This is a reality, already in 61 countries whose legislators demonstrate deep respect for material and nutritional transparency. It is time for us to address the food industry and we are insist, with all due respect, that GMO's be labeled. A compromise, in the opinion of this organization, would be passing GMO labeling without banning GMO crops this year.

GMO's are banned at some level in at least 29 countries, and already a half dozen U.S. counties have gone GMO free. Their makers have been exiled from numerous countries and sued time and again for chemical poisoning alone. It is these products that need to be labeled, it is this you must focus on achieving. The time has come for Hawaii to eject the biotechnology seed industry and abolish the global and political GMO safe-haven that has severely derailed our sustainable future and caused Hawaii to become the foremost site and worldwide ground zero for open air genetic experimentation. The bare minimum is GMO labeling.

Our organization was formed in response to the dire condition of our legislation and state of our agriculture and local food supply regarding GMO corporations. We advocate for citizen engagement in these issues that are coming about when many are unaware they are even up for consideration. Biotechnology corporations conducting research and production of genetically engineered organisms are, in addition to threatening our fragile ecosystem and food supply, literally exposing us to components of war chemicals, spraying it next to schools, and kupuna homes. They speak only on the brilliant aims of their science, not the failed mutations of their reality.

Class action lawsuits are starting to address heavily exposed areas and incidentally, already 52,000 sea urchins were found dead off the coast of a GMO farm in Kauai alone. These are not farming companies, these are chemical

companies who seek to increase the sale of chemicals and the pestilential expansion and cross-contamination of their patented, literally now viral, genetic alterations on life.

GMO's are the most endangering and invasive species of all, there is no recuperation from GMO's, we may never be able to grow food on GMO farm land again. We do not feel GMO's should even be allowed to farm in the open air in Hawaii as they contaminate conventional crops. This is the most pressing issue in Hawaii today. Over 1,000 citizens marched down Beretania to the Capitol on opening day just January 16th to a roar demanding the end of GMO's and at the very least, labeled toxins and that, should be a strong reflection of the community response to GMO's in Hawaii.

We must address GMO industry impacts on our local economy in addition to the social and environmental costs they are inducing. These companies are chemically farming an export GMO seed industry that receives obscene levels of tax relief and retains little to no benefit or profit for the state or the citizens. We desperately need local, non-toxic farming, organic and non-GMO agricultural support, not additional burdens on an industry barely surviving when GMO contamination is only a field away and pesticide drift is impacting residents and agriculture daily.

In addition to performing literally the most open air experimental field trials in the world in Hawaii, they are depleting our natural resources. Hawaii's climate is ideal for agriculture and they are able to turn 3-4 crops per year as opposed to 1-2 most places in the United States. Few other countries allow GMO companies to perform unlimited open air genetic experiments. Please pay close attention to what GMO farms are doing in Hawaii and protect the organic and non-GMO farmers by regulating GMO's and requiring they disclose their contents in food.

The once rich soil, which GMO farms are monocropping compounds similar plantation and chemical farming damages on farm lands. The same nutrients are pulled from the soil over and over, they plant no cover crops and they do not rotate crops. Instead of using cows to fertilize, and chickens to eat the pests, they use chemical fertilizers and pesticides and herbicides which saturate our soil, contaminate groundwater and kill the healthy microorganisms and bacteria that are necessary for plant life.

The companies that produce genetically engineered products are irresponsibly releasing highly controversial new life forms, of highly questionable ethics in regards to health and environmental safety. The companies manufacturing GMO's have been exiled from dozens of countries, and the damages are piling here. As public concern begins to flow and more countries ban or demand labeling, we as a society must also stand up and require the mandation of GMO labeling.

There are multiple versions of GMO's with pesticides engineered into the food, so when you consume Bt corn, for example, every kernel grows its own internal pesticide. This is for sale in your grocery store. That Bt has been found in the majority of blood samples given by pregnant women and their unborn babies' umbilical blood in a study in

Canada alone.

Without proper labeling, tracing the effects of GMO foods in Hawaii health is nearly impossible. Our hapai Mothers should be able to choose whether or not they want to eat food engineered to contain pesticides. All humans deserve the right to know what they are eating and what has been done to it. We are entering a new era wherein the masses want to know the source of their products, particularly their food. As new technologies and chemical farming increase, we want to follow food from the farm to the fork and know what we are supporting.

Regardless of whether or not you are unsure of just how damaging and risky biotechnology is, please hear us now. We have a right to know what we are eating, purchasing and supporting and if it has been genetically modified in addition to the 3000 ingredients, additives and processes which require labeling already. We who are conscious of GMO's will not stop until the power is back in the hands of the people over these unprincipled corporations to choose whether or not they want to eat GMO foods.

You have been given a chance to do something powerful on behalf of the people of Hawaii and stand for Hawaii and say the people have a right to know more than corporations have a right to profit off of their lack of knowledge. We do not want to spend our money on GMO's and need to be able to avoid them in order to pursue happiness and quality of life. Someone who supports them should have a choice to select GMO products, let the market speak for itself. If they one chooses to eat a GMO laden diet and does not care about serious health and environmental implications of doing so, one would still be able to under this legislation. Smokers still smoke carcinogenic formaldehyde soaked cigarettes, even with labels.

GMO corporations rely on the false principle of substantial equivalence and assure the public their foods and crops are no different than original, traditional foods while simultaneously arguing to the patent office that their inventions are unique, have never been created before, and deserve to be patented as different from all other prior existing products, successfully. If GMO foods are no different, how is it that GMO corporations are able to patent them? That alone should raise enough concerns to warrant the mandatory labeling of these foods. Give the children of today a chance to choose tomorrow, they are not old enough yet to make it happen by themselves and the effects of GMOs are irreversible.

Where is their research? Here is ours. The only studies representatives of GMO corporations have publicly referred to with respect, no matter how well peer reviewed, or well enough for 29 other countries to ban GMO's, are the studies funded by their own corporations and interest groups.

Ninety day studies performed by the GM companies themselves is what passes these GMO products into the food supply, when animal studies have proven it is the second and third generation effects that will be most mortal, most sterile, and most mutant, increasingly along the generation lines. GM industry funded safety research proclaiming

assurances that somehow satisfy our FDA, now headed by a former Monsanto executive, are not sufficient proof of their safety. We need you to address the facts. It may be slow to absorb, but we are in dire trouble having let GMO's into Hawaii in the first place. Please fix it.

In addition we have attached a summary analysis of major studies regarding GMO labeling courtesy of Yo Kobayashi. In reality, the cost of implementing GMO labeling is nominal. Food cost fear and paranoia proffered by GE industry representatives are equivalent to propaganda grossly exaggerated by paid employees of the biotechnology industry. Analysis of the studies show the biotech funded studies greatly magnified claims of food cost increase, and that the true increase average was only 5% of their projection.

The average cost per capita per annum is about \$5.

I would like to add that while HB174, HD1 is a massively watered down version of HB174, that does not even require the bulk of GMO ingredients to be labeled. We want ALL GMO's labeled and for the record, we want open air GMO's banned from Hawaii. GMO companies have shown no regard to the environment or public health concerns and should be required to label their products at the absolute, bare minimum. We and our supporters passionately encourage GMO companies to abandon their efforts in Hawaii altogether. We encourage this body to pursue with all force necessary the labeling of genetically modified foods.

Mahalo for considering this testimony in strong support of HB174, HD1 for GMO food labeling.

Best Regards,

Nomi Carmona

President

Babes Against Biotech 501(c)3

Honolulu, HI

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www.babesagainstbiotech.org

www.facebook.com/babesagainstbiotech

www.twitter.com/babesagainstgmo

www.instagram.com/babesagainstbiotech

Key Points of GMO Labeling Cost Discussion by Yo Kobayashi

Summary of major studies: Annual \$5 price increase

The annual price increase to consumers averaged \$5 per person or 0.25% for studies that did not have industry as their client or on their committee members and with the exception of one study, these studies were commissioned by the country's national and local governments. On the other hand, studies which had industry influence averaged annual price increase of \$108 or 3.7% per person. Please see the GMO Labeling Cost Chart in Photos for details.

Industries' habit of greatly overestimating cost: 5% of original estimate

Like in the case of GMO labeling, industries often push back against regulations that protect consumers but are inconvenient to them and one of their main arguments is, cost. A pertinent case is in the late 70's, when chemicals like DDT, PCBs and vinyl chloride were starting to be proven to harmful to people, chemical companies including Monsanto strongly resisted increased regulation with a massive PR campaign and said it would cost 2 million jobs and have a negative economic impact of \$65 billion. After the stronger regulations were enacted, the actual cost turned out to be 5% of their estimate, had no impact to jobs and the industry continued to grow.

Anecdotal evidence from countries that have implemented labeling: no price increase

Numerous countries have mandated GMO labeling and there have been no documented cases of price increase due to the introduction of labeling and anecdotal evidence from the UK at the time of implementation indicated no price increase at the retail level.

Major flaw in study conducted in Oregon, often cited by opponents of GMO labeling

One of the major assumptions behind the 4.7% price increase to Oregon consumers concluded in Northridge Environmental Management Consultants' 2002 "Economic Implementation Analysis of Oregon Measure 27" is flawed and changing the assumption to a more realistic figure could have substantially lowered the already greatly exaggerated price increase estimate. Please see below for details.

Potential cost to state

Given cost estimates ranging from \$200,000 to \$600,000 for the UK government with a population of 59 million people, the cost to the state of Hawaii should be less, given the smaller population. Please see GMO Labeling Cost Chart in Photos for details.

Cost of NOT labeling, the most important consideration from ethical and financial standpoint

Ultimately, the comparison should be to the cost of labeling to NOT labeling.

What is the damage of major diseases and allergies GMOs are associated with? For families, devastating emotional stress and possibly thousands in medical bills, and for the government, potentially the loss of consumer confidence and financial burden in the billions if not more. And all the while, nobody can track or if need be, contain the problem because something as simple as labeling of GMOs are not done.

Resources (Links to Documents):

W.K. Jaeger. 2002. "Economic Issues and Oregon Ballot Measure 27: Labeling of Genetic Modified Foods"
(Oregon St. Economics)

<http://arec.oregonstate.edu/jaeger/personal/em8817.pdf>

Over 130 Studies Regarding GMO Labeling

<http://d3n8a8pro7vhmx.cloudfront.net/labelgmos/pages/34/attachments/original/GM-Crops-just-the-science.pdf?1321839924>

American Academy of Environmental Medicine Position Paper on GMO

<http://www.aaemonline.org/gmopost.html>

Union of Concerned Scientists, High and Dry: Why Genetic Engineering Is Not Solving Agriculture's Drought Problem in a Thirsty World

http://www.ucsusa.org/food_and_agriculture/our-failing-food-system/genetic-engineering/high-and-dry.html

Scientists at the Department of Obstetrics and Gynaecology, at the University of Sherbrooke Hospital Centre in Quebec find pesticides in the blood of pregnant women and unborn babies. Traces of the toxin were found 93% of the pregnant mothers and in 80% of the umbilical cord blood.

<http://www.ncbi.nlm.nih.gov/pubmed/21338670>

Study linking GM maize to cancer must be taken seriously by regulators. Trial suggesting a GM maize strain causes cancer has attracted a torrent of abuse, but it cannot be swept under the carpet

<http://www.guardian.co.uk/environment/2012/sep/28/study-gm-maize-cancer>

Roundup Threat to Future of Food Safety by Microorganism Degradation Preventing Healthy Soil Conditions for Growth http://www.naturalnews.com/035221_Roundup_soil_health_food_supply.html

US Geological Survey Studies by US Department of Interior Indicate Spread of Roundup Active Toxic Ingredient Glyphosate Through Water. 'Widely Used Herbicide Commonly Found in Rain and Streams in the Mississippi River Basin' due to use on GMO crops <http://www.usgs.gov/newsroom/article.asp?ID=2909>

National Center for Biotechnology Information.gov Effects of Roundup(®) and Glyphosate on Three Food Microorganisms: Geotrichum candidum, Lactococcus lactis subsp. cremoris and Lactobacillus delbrueckii subsp. Bulgaricus. Roundup is considered a microbicide and inhibitor of growth in lower levels than agricultural application comparing glyphosate alone to Roundup and its effect on common bacteria used to start industrial cheeses and raw dairy products <http://www.ncbi.nlm.nih.gov/pubmed/22362186>

Devastating Effects of Bayer Pesticide for GM Crops on Bee and Pollinating Insect Population

<http://www.non-gmoreport.com/articles/february2012/insecticideforGMcorn toxicbees.php>

Center for Food Safety Petition to the FDA with 1.1 million signatures, 55 Members of Congress Collect

and Demand GMO Labeling, 36 GMO Labeling Bills Introduced in US, Nearly 50 Countries Require GMO Labeling

<http://www.centerforfoodsafety.org/2012/03/27/record-breaking-one-million-public-comments-demand-fda-label-genetically-engineered-foods/>

50 countries with over 40% of the world's population already label genetically engineered foods, *Link to the Mellman Survey Results showing a random national survey of 1000 Americans showing that 90% favor labeling and 5% oppose <http://www.labelgmos.org/faqs>

Genetically Engineered Food Labeling Laws Global Map <http://www.centerforfoodsafety.org/ge-map/>

Just Label It Regarding petition to the FDA of 1.1 million signatures to label GMOs 91% of the American people <http://justlabelit.org/fda-responds-to-1-1-million/>

Thomson Reuters 2010 Survey of National Healthcare Consumers regarding Genetically Engineered Foods showing 93.1% of 100,000 surveyed want GE foods labeled

http://www.factsforhealthcare.com/pressroom/NPR_report_GeneticEngineeredFood.pdf

University of Purdue Abstract Multiple Routes of GMO Associated Pesticide Exposure for Honeybees Living Near Agricultural Fields <http://www.purdue.edu/newsroom/research/2012/120111KrupkeBees.html>

Monsanto vs. US Farmers 2010 – Documents downloaded from Monsanto.com meant to entice (or intimidate) potential seed buyers to choose GE seed, demonstrating the spread of contaminating GMO seed as Monsanto advertisement to potential GMO farmers demonstrates the lawsuits they have against “biopirate” farmers, the majority of whose fields are contaminated by GE seeds and will lose everything to Monsanto based on the company's track record. Blatantly advertising, “It's not worth the risk!” (to grow anything except our seed, or we will eventually contaminate your farm and sue you as we are suing these numbered offenders and you could lose everything simply by having a neighboring farm contaminated which we will call patent infringement including) threatening “Loss of technology license, loss of access to all traits, financial exposure up to \$500/acre, litigation costs and crop destruct” if farmers choose to not buy GE seed. They then use the “pretrial cash settlement” money to put young kids on the agritech career track.

<http://www.centerforfoodsafety.org/wp-content/uploads/2012/03/Monsanto-v-US-Farmer-2010-Update-v.-2.pdf>

Statistics from the biotech industry indicating rapid contamination of conventional seed by GMO seed in US indicating GE monocropping on the near horizon

http://www.gmo-compass.org/eng/agri_biotechnology/gmo_planting/506.usa_cultivation_gm_plants_2009.html

The Regulation of GMOs in Europe and the United States: A Case-Study of Contemporary European Regulatory Politics “Prince Charles also joined the public opposition to bioengineered crops. Stating that genetically-engineered foods take mankind into "realms that belong to God," the Prince cited concerns about long-term consequences for the environment and human health. [48] Leading chefs in the UK announced their opposition, calling for a moratorium on GMOs. Food writers also launched a campaign against GMOs, calling genetic engineering the equivalent of "imposing a genetic experiment on the public, which could have unpredictable and irreversible adverse consequences." [49] Pictures of a "Frankenstein potato" appeared on the pages of The Economist.[50]”

<http://www.cfr.org/genetically-modified-organisms/regulation-gmos-europe-united-states-case-study-contemporary-european-regulatory-politics/p8688>

Chicago Tribune May 2011 To clarify the misconception that there are plenty of grocery stores that sell all non-GMO food for those interested at this point all grocery stores contain GMOs – food does still need to be labeled regardless of the retailer - 2006 study for the Pew Initiative for Food and Biotechnology found that only 23 percent of women (the primary shopping decision makers) thought genetically modified foods were safe. The same Pew study found that only 26 percent of American consumers believed they'd ever eaten genetically modified food, while a 2010 survey by the International Food Information Council reported that only 28 percent of respondents knew such foods were sold in stores. <http://www.chicagotribune.com/health/ct-met-gmo-food-labeling--20110524,0,5841902.story>

New York Times Opinion on GMO Labeling April 3, 2012 Why Aren't G.M.O. Foods Labeled?

<http://opinionator.blogs.nytimes.com/2011/02/15/why-arent-g-m-o-foods-labeled/?ref=opinion2008>

Waimea Residents Sue Pioneer

http://thegardenisland.com/news/local/waimea-residents-sue-pioneer/article_82ff2c3e-2632-11e1-9ca7-001871e3ce6c.html

Syngenta Pesticides Poison Elementary School

<http://www.islandbreath.org/2006Year/16-farming/0616-20WaimeaPoison.html>

Kauai Large Scale Die Off of Sea Urchins

http://thegardenisland.com/news/local/large-scale-die-off-of-sea-urchins-discovered-off-kaumakani/article_16081484-5a1b-11e1-bca7-0019bb2963f4.html

The Most Toxic Pesticide You'll Soon Be Eating, Rodale, Emily Main

<http://www.rodale.com/24-d-and-superweeds> <http://www.rodale.com/24-d-and-superweeds>

Herbicide (2,4-D) Increases Insect and Pathogen Pests on Corn I. N. OKA and DAVID PIMENTEL
Science 16 July 1976: 239-240. [DOI:10.1126/science.193.4249.239]

<http://www.sciencemag.org/content/193/4249/239.abstract?sid=5f16e2e1-8ac1-46e0-883b-e6a10084b8e0>

Growth Inhibitor in Immature Soybean Seeds and 2,4-D-Sprayed Soybean Seedlings. JOE L. KEY and DONALD S. GALITZ
Science 13 November 1959: 1340-1341. [DOI:10.1126/science.130.3385.1340]

<http://www.sciencemag.org/content/130/3385/1340.abstract?sid=5f16e2e1-8ac1-46e0-883b-e6a10084b8e0>

2,4-D Herbicides Pose Threat to Cotton and Other Susceptible Crops. ROSS E. HUTCHINS
Science 25 December 1953: 782-783. [DOI:10.1126/science.118.3078.782]

<http://www.sciencemag.org/content/118/3078/782.extract?sid=5f16e2e1-8ac1-46e0-883b-e6a10084b8e0>

Agent Orange Corn' Debate Rages As Dow Seeks Approval Of New Genetically Modified Seed. Lucia Graves, Huffington Post, April 26, 2012

http://www.huffingtonpost.com/2012/04/26/enlist-dow-agent-orange-corn_n_1456129.html

Neonicotinoid Pesticide Reduces Bumble Bee Colony Growth and Queen Production. Penelope R. Whitehorn, Stephanie O'Connor, Felix L. Wackers, and Dave Goulson
Science 20 April 2012: 351-352. Published online 29 March 2012 [DOI:10.1126/science.1215025]

<http://www.sciencemag.org/content/336/6079/351.abstract?sid=1fea041e-9f07-40f2-953b-bcffc77962ac>

Higes M, et al. Honeybee colony collapse due to *Nosema ceranae* in professional apiaries. Environ Microbiol Rep. 2009;1:110–113.

Decourtye A, Devillers J, Cluzeau S, Charreton M, Pham-Delègue M. Effects of imidacloprid and deltamethrin on associative learning in honeybees under semi-field and laboratory conditions. Ecotoxicol Environ Saf. 2004;57:410–419.

A Common Pesticide Decreases Foraging Success and Survival in Honey Bees. Mickaël Henry, Maxime Béguin, Fabrice Requier, Oriane Rollin, Jean-François Odoux, Pierrick Aupinel, Jean Aptel, Sylvie Tchamitchian, and Axel Decourtye
Science 20 April 2012: 348-350. Published online 29 March 2012 [DOI:10.1126/science.1215039]

<http://www.sciencemag.org/content/336/6079/348.abstract?sid=1fea041e-9f07-40f2-953b-bcffc77962ac>

Widely Used Pesticides Are Killing Bees

http://www.huffingtonpost.com/heather-pilatic/bees-pesticides-studies_b_1389499.html

In addition for your reference we are including the following volume of 71 items of scientific evidence showing harm of GMO food consumption compiled by the The Safe Food Foundation:

- (a) Aris, A and Leblanc, S. (2011) "Maternal and fetal exposure to pesticides associated to genetically modified foods in Eastern Townships of Quebec, Canada" Reproductive Toxicology, 2011 May; 31(4):528-33. Epub 2011 Feb 18.
 - (b) Antoniou, M et al. (2011) "Roundup and birth defects: Is the public being kept in the dark?" Earth Open Source.
- (1) Agodi, A. et al. (2006) "Detection of genetically modified DNA sequences in milk from The Italian market". International Journal of Hygiene and Environmental Health, 209, 81-88.
 - (2) Benachour N, Sipahutar H, Moslemi S. et al. "Time- and dose- dependent effects of roundup on human embryonic and placental cells". Arch Environ Contam Toxicol. 2007;53:126-133
 - (3) Benachour, N. and Seralini, G-E. 2008, "Glyphosate Formulations Induce Apoptosis and Necrosis in Human Umbilical, Embryonic, and Placental Cells", Chemical Research in Toxicology, DOI: 10.1021/ tx800218n. Publication Date (Web): December 23, 2008
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 - (5) Chowdhury, E.H., et al (2003) "Detection of corn intrinsic and recombinant DNA fragments and Cry1Ab protein in the gastrointestinal contents of pigs fed genetically modified corn Bt11". Journal of Animal Science 81, 2546-2551.
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 - (8) Dutton, A., H. Klein, J. Romeis, and F. Bigler, 2002, "Uptake of Bt-toxin by herbivores feeding on transgenic maize and consequences for the predator Chrysoperia carnea," Ecological Entomology 27 (2002): 441–7
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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 9:05 PM
To: CPCtestimony
Cc: hike2heaven@yahoo.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: Dear Concerned, I support the bill that will require all imported genetically engineered fresh produce sold in Hawaii to be labeled as "genetically engineered". Thank you, Lisa Kerman P.O. Box 1011 Kilauea, HI.96754

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

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 9:07 PM
To: CPCtestimony
Cc: dharmadave7@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
David Myrick	Individual	Oppose	No

Comments: Please recognize that G.E. foods are part of a genocide depopulation program and they also deeply harm our common mother Earth.

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 9:27 PM
To: CPCtestimony
Cc: rogerwalraven@yahoo.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Roger Walraven	Individual	Support	No

Comments: Label GMOs. I want to know what I am feeding my grandson. I need to know, so I can make an informed decision. You owe the people of Hawaii that right to knowledge.

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 9:27 PM
To: CPCtestimony
Cc: islandstyle16@yahoo.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: please understand its our Right to know. For how much we work hard at our earnings, the all mighty dollar seems to be the biggest vote out there!!!! We need to know "where" as what companies with what goals and ideals were investing and "where" environmentally were investing in our future as well

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 9:32 PM
To: CPCtestimony
Cc: Jillpupukea@hawaii.rr.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Jillian Yasutake	Individual	Support	No

Comments: I support passage of HB174 in order to achieve Hawaii's goals of food security and self-sufficiency.

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 9:38 PM
To: CPCtestimony
Cc: mealaaloha@aol.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Daniel Bishop	Individual	Support	No

Comments: we have the right to know what we eat

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 9:50 PM
To: CPCtestimony
Cc: Mitsuyolani@hotmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Mitsuyo Suzuki	Individual	Support	No

Comments: Support to know what foods are GMO for my family and our society's health!

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LABEL IT HAWAII

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HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Wednesday February 13, 2013 2:30 p.m.

Re: HB174

Aloha Chair McKelvey, Vice Chair Kawakami and Committee Members:

On behalf of Label It Hawai'i, we thank you for the opportunity to submit testimony. We are in strong support of HB174. We are a grassroots organization dedicated to preserving sustainable, ethical and healthy food for Hawaii's people. The mission of Label It Hawai'i is to bring about awareness of GMOs (genetically modified organisms) in our food supply, through our educational outreach programs. Our goal is to urge elected officials to pass a bill protecting the consumers' right to know what we are eating. To date, we have collected over 2,000 signatures petitioning the legislature to label genetically modified organisms.

In light of the findings from the Center for Food Safety, the Union of Concerned Scientists, the American Academy of Environmental Medicine, and the Food and Drug Administration's (FDA) own scientists regarding the safety of these products, Hawai'i consumers are stepping forward to question the safety of these products. Due to the economic, environmental and potential health risks associated with GMOs, consumers should have the power to decide whether to support such agricultural practices by the biotech industry.

GMO crops have the capacity to cross contaminate neighboring conventional and organic fields. This results in the loss of income and livelihood for farmers and undermines the quality of their products. Farmers have been sued for patent violations when GMO pollen has contaminated their fields. The idea that the GMO, conventional and organic industry can co-exist is a myth that threatens the very biodiversity that is needed to continue a sustainable food production system. The loss of organic produce alone jeopardizes the availability of such foods and consumer choice at the supermarket.

Contrary to claims of reduced herbicide usage, a peer reviewed study in Environmental Sciences Europe by Dr. Charles Benbrook, shows that herbicide usage is, in fact, increasing. This increase has created herbicide-resistant super weeds. These super weeds bolster the amount of chemicals being sprayed on crops and give way to the use of more powerful chemicals. Label It Hawai'i views this as a dangerous cycle. Glyphosate, a component of RoundUp, has been found to be toxic to animals and amphibians. The US Geological Study shows that glyphosate is found in all waterways within the Mississippi Basin, which means it is not biodegradable. We are being exposed to this herbicide through our food consumption and water systems.

Label It Hawai'i acknowledges the FDA's policy in Section 402(a)(1) which states, "the act imposes a legal duty on those who introduce food into the market place, including food derived from new crop varieties, to ensure that the food satisfies the applicable safety standard." The FDA, United States Department of Agriculture (USDA) and the Environmental Protection Agency (EPA) do not test these products before being introduced in the market for human consumption. There are no long term studies provided by the biotech industry citing safety of GMO foods. The policy of "substantial equivalence" cannot apply to such products if patents have been obtained claiming novel and non-obvious traits.

GMOs are either banned or labeled in over 60 countries worldwide. According to the Hawai'i Department of Agriculture, the Rainbow papaya is already being labeled individually in our state prior to export to Japan. These same labels should be available here. Hawai'i consumers deserve to know the nature of ALL the ingredients in the food they are eating.

We urge you to pass HB174.

Respectfully submitted,

Mary Oyama

Label It Hawai'i

kawakami2 - Rise

From: James W. Macey [maceyj001@hawaii.rr.com]
Sent: Tuesday, February 12, 2013 10:17 PM
To: CPCtestimony
Subject: HB 174 RELATING TO FOOD LABELING - 72 Studies Showing Evidence of Harm From GE Foods

CPC Committee Members,

The Safe Food Foundation is concerned by the large volume of scientific material showing evidence of harm from GM foods.

The papers below relate only to the direct and indirect effects of the consumption of GM food and feed -- ie evidence of (1) GM plant toxicity (this would include all animal feeding, immunotoxicity, inhalation etc trials) and (2) evidence of potential harm from the indirect effects of GM plants through inseparable or unavoidable production methods (e.g. the effects of added Roundup residues which are unique to Roundup Ready plants or possibly other HT plants). Some papers discuss the survival of DNA from GM plants in the mammal digestive system, since there are obvious health implications.

We do not include papers which show environmental damage, relating to GM plant toxicity to animals in the food web (these may result in environmental harm or increase the evidence of potential human toxicities) and relating to potential harm to the food web from the indirect effects of GM plants through inseparable or unavoidable production methods (this could include the rise in glyphosate resistant weeds that also increase the chance of their toxins contaminating human food supplies).

The papers towards the end of the list are recommended reviews which summarize earlier published raw data -- and look for cause and effect relationships -- but which do not necessarily report new experimental data.

Papers published in 2011

- (1) [Arise, A and Leblanc, S. \(2011\) "Maternal and fetal exposure to pesticides associated to genetically modified foods in Eastern Townships of Quebec, Canada"](#) Reproductive Toxicology, 2011 May; 31(4):528-33. Epub 2011 Feb 18.
- (2) [Antonioniou, M et al. \(2011\) "Roundup and birth defects: Is the public being kept in the dark?"](#) Earth Open Source.

Papers published prior to 2011

- (1) Agodi, A. et al. (2006) "Detection of genetically modified DNA sequences in milk from The Italian market". *International Journal of Hygiene and Environmental Health*, 209, 81-88.
- (2) Benachour N, Sipahutar H, Moslemi S. et al. "Time- and dose- dependent effects of roundup on human embryonic and placental cells". *Arch Environ Contam Toxicol*. 2007;53:126-133
- (3) Benachour, N. and Seralini, G-E. 2008, "Glyphosate Formulations Induce Apoptosis and Necrosis in Human Umbilical, Embryonic, and Placental Cells", *Chemical Research in Toxicology*, DOI: 10.1021/ tx800218n. Publication Date (Web): December 23, 2008
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Mahalo,
James W. Macey

kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 12, 2013 10:28 PM
To: CPCtestimony
Cc: michaelbroady@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Michael Broady Jr.	Individual	Support	Yes

Comments: Aloha, my name is Michael Broady Jr., I am a life long resident of O'ahu, a student at Leeward Community College, and a small organic farmer practicing biodiverse permaculture on limited land. I do support HB 174 as a step towards the consumer's right to know what they are buying, but I ask that you strike the HD1 amendments, and pass HB 174 with it's original language. I would like to know if the locally grown papayas I buy at Foodland are GMO or not. As a small farmer, it becomes nearly impossible to grow healthy organic food next to a field which has been genetically engineered to resist heavy routine spraying of war chemicals. Possible contamination from cross pollination has forced me into the difficult decision of not growing corn, although as a Native American, corn is my ancestor. The simple act of growing papaya trees becomes a time-intensive science of researching and testing to ensure the trees are non-GMO. Fruit trees are not pollinated and do not fruit when the GMO corporations spray heavily with the war chemicals they have engineered their fields to resist. The simple lifestyle of malama 'aina has become nearly impossible with these bad neighbors around. Vandana Shiva has described the effects of the GMO corporations as the genocide of farmers; the systematic destruction of a group of people: the stewards of the land. If we choose to allow these corporations to poison our communities, we choose to sacrifice the farmers. The problem is that most consumers do not realize they are choosing to support the GMO corporations because GMOs are not labeled, even though they are in most processed foods found in stores. Please allow consumers to consciously decide whether they would like to support "food" grown with chemicals designed to kill.

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HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: Hello, My name is Agustin Garcia; I believe that consumers have the right to know what is in our food and how the food was procured. There are a plethora of scientific studies which indicate that Genetically Modified foods have malignant and deleterious effects on living systems, yet super power food industries use them basically as a staple crop which floods our supermarkets. Please take away the deceitful power that corporations have over the people, and give some power back to the people with their power of choice to choose GMO or GMO free foods. It should be an inalienable right; what we put in our bodies are the building blocks of life. Let's allow people to have the knowledge to decide what they use as their building material, we ought to allow it, at the very least.

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Cc: angelavideotron@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: Aloha Representatives, Thank you for the opportunity to testify in support of HB 174 which requires all imported genetically engineered fresh produce sold in Hawaii to be labeled as "genetically engineered". We have a right to know what is in the foods we eat, and that includes genes. While this bill only requires labeling of imported fresh produce and I would prefer it required labeling on locally grown produce as well, I strongly support it as a first step to truth in labeling of genetically modified foods. HB 174 can also help our local farmers to adopt more pono farming practices and boost Hawaii's organic agricultural output. The labeling of imported genetically modified produce will encourage more people to shift to buying produce from local farmers. I have worked on a small organic farm on the North Shore for almost 3 years. Organic local produce has a higher nutritional value, is safer for our keiki, and nurtures the soil, water and air so we can grow more food with less costly inputs like chemical fertilizers. Please pass HB 174 and protect our right to know. Mahalo, Angela Breene Haleiwa, HI

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To: CPCtestimony
Cc: floramarie@hawaiiintel.net
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Flora Worth	Individual	Support	No

Comments: We ALL have a basic right to know what we are buying and eating. Results on animals fed GE foods have not been favorable (sterility, deformity, compromised immune systems, outright rejection of GE food) and should not be available for human consumption. Please do not risk the health and well being of any person by allowing us to unknowingly ingest food that may prove harmful to us. Many countries have banned GE foods and refuse to purchase them from elsewhere. These crops worldwide have not lived up to the promises made by the companies that have produced them. Can we trust that they are telling us the truth about the GE food safety? Can we really afford to gamble with our very lives?

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Personal Testimony on HB174 HD1

Hawaii State Legislature, House Consumer Protection and Commerce Committee

February 12, 2013

Submitted by Harold Keyser, Ph.D.

Regarding: HB174 HD1 Relating to Food Labeling

Position: **Oppose**

My name is Harold Keyser, I reside in Kula, Maui, and I am pleased to provide personal testimony in opposition to HB174 HD1. I am a retired agricultural scientist with academic degrees in plant science, ecology and soil science from UC Davis, and I have 34 years professional service with the USDA in the Nitrogen Fixation and Soybean Genetics Lab and with the University of Hawaii as a researcher and Maui County Administrator for the College of Tropical Agriculture and Human Resources.

This bill is based on ignorance and fear with no scientific justification.

The misconceptions inherent in it, if accepted, lead to bad public policy that is anti-consumer, policy making that would ignore science and succumb to anti-science activists.

Mandatory labels currently used emphasize important safety and nutritional information of the product, and attempts to label based on the breeding process would detract from the current science-based criteria. Mandatory labels imply a meaningful difference, but in this case regulatory agencies and the scientific community have determined there is no difference in nutritional composition and safety between biotech foods and their non-biotech counterparts.

The most respected scientific organizations around the world, including our own National Academy of Sciences, the American Medical Association and the American Association for the Advancement of Science, conclude that genetic engineering is at least as safe and often safer than conventional breeding and over 3,200 renowned scientists worldwide have signed a declaration in support of agricultural biotechnology and its safety to humans, animals and the environment.

What are the potential economic implications of unjustified mandatory labeling based on the method of plant breeding? In the European Union, food is no safer than that in the US, however it is more expensive by almost double as a percent of income, and unnecessary labeling and resultant tracking requirements are partially responsible.

Civilization rests on our ability to modify plants to make them more suitable as food, feed and fiber, and all of these modifications are genetic. As Carl Sagan noted, science is a candle in the dark of a demon-haunted world that is full of angst, ignorance and

superstition. Demonizing a modern method of plant breeding that has revolutionized agriculture in so many positive ways is not something legislators should be willing to codify.

Thank you for the opportunity to provide this input.

Additional science-based information and resources on this topic can be found at:

<http://ucbiotech.org/>

<http://plantbiology.ucr.edu/faculty/mchughen.html>

<https://ssl3.ama-assn.org/apps/ecommm/PolicyFinderForm.pl?site=www.ama-assn.org&uri=%2fresources%2fdoc%2fPolicyFinder%2fpolicyfiles%2fHnE%2fH-480.958.HTM>

http://www.aaas.org/news/releases/2012/media/AAAS_GM_statement.pdf

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Cc: kuaaigeo@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
george hoffberg	Individual	Support	No

Comments: gmo ar efound to be hazzardous to health

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To: CPCtestimony
Cc: tmongan@honuguide.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: Please label GMO foods. I just want to know what I am eating. Aloha.

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Cc: claudiarice25@gmail.com
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HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
claudia rice	Individual	Support	No

Comments: ALL products containing gmo ingredients should be labelled! Mahalo!

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Cc: foodsovereignty@now@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments: As a mother of three, I am concerned about the health of my children and future generations. I would appreciate GMOs to be labeled so that mothers like me can know what we are feeding our families. It is our fundamental right to know if our food has been genetically altered and we should have the right to choose if we want to take the health risks associated with GMOs. Every month there are new findings about genes and gene technology. Scientist admit we still don't know much about them. I am opposed to having any GMOs in our food supply until it has been proven SAFE, but the evidence that has been exposed thus far has been quite the contrary. I really find the FDA and USDA are being irresponsible for allowing them n our food supply without proper testing and using us as their guinea pigs. Please help protect the residents of Hawaii by supporting this bill and label GMOs. Thank you.

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Cc: shannonkona@gmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/12/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Support	No

Comments:

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Cindy Goldstein, Ph. D
Business and Community Outreach Manager
DuPont Pioneer
Waiialua Parent Seed, Kekaha Parent Seed
Kunia Research Center, Waimea Research
PO Box 520
Waiialua, HI 96791

HB 174,H.D.1: Relating to food labeling genetically engineered produce
House Committee on Consumer Protection and Commerce
February 13, 2013
State Capitol Room 325 at 2:30 pm

Position: Opposed

Chair McKelvey, Vice Chair Kawakami, and Members of the House Committee on Consumer Protection and Commerce

DuPont Pioneer opposes HB 174 H.D.1, calling for labeling of imported genetically engineered produce intended for human consumption.

DuPont Pioneer is a seed company with operations in four locations in Hawaii. We carry out work with both genetically engineered and non GE plant materials. DuPont Pioneer employs approximately 350 people in a wide range of types of jobs on Oahu and Kaua'i.

Invasive species have had significant negative impacts on farming and ecosystems throughout Hawaii. Preventing entrance of invasive species into Hawaii is of great importance. Requiring compliance with recommendations of the Invasive Species Council related to threatening species is vague and subject to broad interpretation.

DuPont Pioneer strongly believes in the importance of research and innovation to develop crops that bring benefit to agriculture producers. Our work is science-based and the introduction of new genetically engineered crops follows years of evaluation and testing under a robust regulatory system.

There is widespread agreement among scientists and the regulatory system that scientific studies and thorough evaluation of data show biotech crops and food ingredients are safe. No significant difference has been found between foods produced using biotechnology when compared to their conventional counterparts. Two federal agencies scrutinize and regulate biotech crops and foods. The US Department of Agriculture provides extensive oversight and evaluates health and safety impacts of new genetically engineered crops and genes prior to initial planting of a new genetically engineered crop. The US Food and Drug Administration reviews extensive data on the chemical composition, nutritional value, potential for allergenicity, and other health and safety related components of genetically engineered crops.

Special labels are not required based on the method used to develop a food or food ingredient. The FDA's evaluation of biotechnology food focuses on foods being substantially equivalent in composition and nutrition. Scientific evaluation shows biotech whole foods and foods with genetically engineered ingredients are substantially equivalent and consistently show they are safe.

Consumers that wish to avoid eating genetically engineered foods already have a way to easily differentiate products. Organic produce imported into Hawaii does not have GE content. Food producers already use organic and GMO-free labels on produce

Thank you for the opportunity to present testimony in support of science-based decision making, in opposition to proposed legislation requiring labeling of genetically engineered produce imported into Hawaii.

kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 1:38 AM
To: CPCtestimony
Cc: sbutterfly444@aol.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
shelby hansen	Individual	Support	No

Comments: It is sad that this bill has been gutted. But its a step in the right direction. Thank you for doing the right thing. Your continued support is appreciated. The public will not stop demanding ALL products containing GMO ingredients are labeled. Mahalo, Shelby

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 5:01 AM
To: CPCtestimony
Cc: fritze001@hawaii.rr.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
everett fritz	Individual	Support	No

Comments: locally produced gmo's should also have to label as such.

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Monsanto Co.
94-520 Kunia Road
Kunia, HI 96759

Testimony Before the Committee on Consumer Protection and Commerce

February 13, 2013
2:30 PM

Testimony on HB 174-Relating to Food Labeling

My name is Fred Perlak, Vice President of Research and Business Operations for Monsanto Hawaii. We **strongly oppose** HB 174 primarily on the basis that there are Federal regulations for labeling that cover long-standing precedents in food regulation. The state does not have the funds, the expertise or the manpower to properly label our food. It will be difficult for State regulators to inspect and test all products being sold or distributed in the State for compliance with a genetically engineered labeling system. There is no evidence of safety concerns or nutritional differences. Any additional costs incurred by food manufactures would be passed on to Hawaii consumers. The USDA estimates that food costs will increase 3-4% in 2013 and we do not want additional costs added on to our already high food bills.

Federal law already requires accurate food labeling that provides information relevant to health, safety and nutrition of all food products sold in the United States. The FDA establishes uniform labeling requirements to be consistent with consumer protection and commerce on a nation wide basis. This agency requires labeling only to indicate that a food raises questions of safety, nutrition or proper usage. Federal research and regulatory agencies have conducted and reviewed years of studies that show no health or safety concerns. Research has found crops currently available from biotechnology to be as safe as those produced via other more conventional methods. Current labeling regulations do allow for voluntary labeling. Food manufacturers will respond to public demand with products and labels if the demand were genuine and widespread. This bill will cause unnecessary confusion and expense for food retailers and consumers. It is an attempt to add layers of regulation, cost and confusion to our food chain without improving safety or availability. It is certain that if this bill becomes law, the consumer will have fewer choices at higher expense.

Let the marketplace and the Federal guidelines dictate the labeling of our food. Please do not pass HB 174 from committee.

Thank you.

Fred Perlak, Ph.D.
Distinguished Monsanto Science Fellow
Vice President, Business and Research Operations, Monsanto Hawaii

kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 7:21 AM
To: CPCtestimony
Cc: tomdee55@mac.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Tom DeCaro	Individual	Support	No

Comments: I strongly support this bill!! I am very concerned about Kauai's involvment in GMO food production and we need to stop it! I am a resident of Anahola.

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From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 7:33 AM
To: CPCtestimony
Cc: watsonblake8@gmail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Blake Watson	Individual	Support	No

Comments: Aloha Consumer Protection Committee, I am in support of this measure as a very small but important step in the right direction. I am a parent, and that is the most important reason, among many others, that I support this bill. The fact that we (Hawaii) sell GMO papaya to other countries (like Japan) and already put a label on it, without any complaints from the industry, should tell you that labeling itself is not expensive. But ask yourself this question: In a land of freedom and liberty that we are, why are we denied a label, that is put on produce grown on our own Hawaiian soil for export, without controversy? That is what is controversial; not the labeling of these patented gene events, but the fact ours is the only free nation that bars us the freedom to choose. If a biotech company can sue a non gmo farmer for what amounts to gene pollution on an adjacent non gmo farm, yet as consumers we cannot be allowed to know if we are eating these gene events, then there is something seriously out of balance. You, as elected officials are here to represent the people, not just big industries such as Monsanto and Syngenta. There is nothing in this fight to get GMO labeling for us as people except to know what we are eating. It's for our health that truth in labeling laws already exist. On the other hand, the Crop Improvement Association, Farm Bureau, and many other biotech industry front groups have only one reason they don't want labels, and it's not to look out for the people's health or even the livelihood of farmers. No, instead it's their own bottom line. That is why you must balance this equation, for the people, and give us consumers the right to choose. We are supposed to be living in a free country with a free market; this looks more like state sponsored control of our diet. While this bill should include all imported and locally grown foods, at least it is a step in the right direction. All the food companies that are lobbying against this bill already have to label gmo foods for export to the 61 other countries that require it; they do this without controversy. Please help preserve our liberty to opt out of involuntarily eating foods that have been linked to many new food allergies, liver toxicity, sterility, and cancer...just to name a few. Lobbyists representing biotechnology companies will tell you that these foods are proven safe by "safety studies" that are voluntarily conducted by the same companies they represent. This is not real oversight over a system that is supposed to protect us, but that is what the FDA "requires" for oversight. It's a massive conflict of interest, and a sham. The FDA is bought out by biotech, quite obviously. Please look up Michael Taylor for one shining example. The Honolulu County Council recently rejected the wish by all the other Counties of the State of Hawaii to get a GMO label law passed this year by saying that "people who don't like GMO food can already avoid it by eating organic". This is a very irresponsible thing to say, when %75 of the food on grocery store shelves secretly contains GMO ingredients. Not to mention what public schools are feeding our keiki. Having the right to choose to not eat this stuff because of clear labeling is exactly the same thing as having the right to avoid ingredients we know we don't want to eat by simply looking at the ingredients on the package, something already well

established and demanded by law. Those laws are there for very good reasons. One is liberty, and another is science, to name a couple. Finally, the argument is often posited that labeling GMO foods will “hurt the farmers”. Well, actually an article that came out last month in the Hilo Tribune Herald (<http://hawaiitribune-herald.com/sections/news/local-news/promising-papayas.html>) discusses Japanese consumption of GMO papaya , one year after the ban that Japan had on importing Hawaiian papaya for the last decade or so (due to safety concerns when the GMO Rainbow papaya was introduced). Apparently, in all of 2012, only 4500 lbs of GMO Rainbow papaya was sold to the Japanese market as a whole, as opposed to 1.3 million lbs of “non-gmo” papaya sold to Japan in the same year. Clearly, they don’t want to eat much of it. And neither do many other countries. So GMO is actually bad for farmers in the long run. Reason? The market decides what it wants; we vote with our dollars. This is liberty and it should not be controversial at all to simply label what our food contains. Mahalo for your support of this Bill, Blake Watson (808)315-4007, Volcano, Hawaii

References of the most recent publications showing evidence of risk Birth-defects and skeletal malformations: Antoniou M, Habib MEM, Howard CV, Jennings RC, Leifert C, et al. (2012) Teratogenic Effects of Glyphosate-Based Herbicides: Divergence of Regulatory Decisions from Scientific Evidence. *J Environ Anal Toxicol* S4:006. doi:10.4172/2161-0525.S4-00 Cell death from exposure to Roundup: Martini, C.N. Matías Gabrielli, María del C. Vila. 2012. A commercial formulation of glyphosate inhibits proliferation and differentiation to adipocytes and induces apoptosis in 3T3-L1 fibroblasts. *Toxicology in Vitro* 26:1007–1013. <http://dx.doi.org/10.1016/j.tiv.2012.04.017> Liver and kidney toxicity: Séralini, G.-E., et al. Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize. *Food Chem. Toxicol.* (2012), <http://dx.doi.org/10.1016/j.fct.2012.08.005> Other Reviews showing evidence of risk: American Academy of Environmental Medicine. 2009.

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 7:34 AM
To: CPCtestimony
Cc: keani_nwr@msn.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Keani Rawlins-Fernandez	Individual	Support	No

Comments:

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 7:35 AM
To: CPCtestimony
Cc: Jsenhydra@hotmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

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

Comments:

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 7:36 AM
To: CPCtestimony
Cc: ssjmakena@hotmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Makena Fernandez	Individual	Support	No

Comments:

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kawakami2 - Rise

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 7:39 AM
To: CPCtestimony
Cc: Stewart.brady@ymail.com
Subject: Submitted testimony for HB174 on Feb 13, 2013 14:30PM

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Brady stewart	Individual	Support	No

Comments: Consumers need to be allowed the opportunity to make informed choices when they buy their food. If all genetically modified foods were labeled as such then consumers would be able to "vote with their pocketbooks" just like they did with the bovine growth hormones in milk. That product is no longer on the market because people do not want their food tampered with. Please pass this bill forcing food producers to label all foods containing genetically engineered ingredients. Only when we are allowed to make informed decisions can we show where we stand on this GMO issue and send these chemical corporations packing.

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From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 13, 2013 7:57 AM
To: CPCtestimony
Cc: peacesubhadra@gmail.com
Subject: *Submitted testimony for HB174 on Feb 13, 2013 14:30PM*

HB174

Submitted on: 2/13/2013

Testimony for CPC on Feb 13, 2013 14:30PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
D. Corcoran	Individual	Support	No

Comments:

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HB 174 HD1 Labeling of Genetically engineered foods and products
CPC on Wednesday, 02-13-13 2:30PM in
House conference room 325.

Aloha Chairman and Committee Members

Thank you for the opportunity to testify. I encourage you to label all genetically engineered foods and products. The rationale of using and enacting a labeling regime applicable to the labeling words, "genetically engineered: "

1. **BioSafety.** The risk of unintended consequences is other than that which occurs in nature. "

The genetically engineering process is not limited to 1 gene, 1 trait concept as originally believed. In ag it has involves a toxin engineered into the seed or cell which on more recent discovery, and toxic effects can cross into the blood and urine and from pregnant mother to child through the placenta. The gene toxin is subject to a network of interactions which may be unpredictable and not always precise, despite the myths of industry. Gene VI, a virus was recently discovered to be widespread in commercial GMO crops which can create a situation in which the virus can attack the host.

<http://independentsciencenews.org/commentaries/regulators-discover-a-hidden-viral-gene-in-commercial-gmo-crops/>The precautionary principle should be the guiding principle in this regard.

2. **To counteract abuse, trace representations, branding, and the process of packing and transporting, and to ascertain counterfeit labeling fraud.** Truth in Identifying, Labeling and Fair Packaging requirements are a biosafety provision.

3. **To trace product influence to note benefit or harms.** Imports give only half the picture. Label them all as our counties have requested.

4., **Disclosure is our human rights provision regarding informed choice.**

5., **Human beings have the right to not be manipulated or experimented on without our knowledge or informed consent.** Therefore, disclosure is essential.

6.. **Labeling in this case is our inalienable human right to protect our genetic lines.** The strength of our species depends on being provided informed choice on this matter.

The people of the state of Hawaii have testified before our county councils. Maui County, Kauai, Big Island of Hawaii County Councils, all signed a

resolution in SUPPORT of labeling of ALL GMO foods and products. The County Council in Oahu was denied the right of full disclosure prior to voting on the legislative package HSAC usurped by a gut and replace practice of the provision supporting Labeling of all GMO foods and products. The intention of the petitions and testimony supported the intent of unification of the islands on the issue of Labeling according to Tom Berg, former Oahu's County Council member.

Who should bear the cost of labeling?

In this case of genetically engineered crops and foods, with the bt toxin engineered directly into the seed's gene, this has no benefit to humans, only the producer for convenience, patent, and cost benefit. Engineering the bt toxin into the cell was an idea born by industry weighing convenience and costs, vs harm and unintended risks,

Industry should be accountable including the cost of education, disclosure and labeling and costs of redress from harms. Or, choose a different method to achieve their production purpose. Manufacturers have the choice to remove the "bioengineered ingredient or bear the cost of labeling. We as human beings, are not commodities, --and should not be sacrificed in the process.

The precautionary principle puts the burden of safety and precaution on the producers and manufacturers, not the victims. Industry should bear the burden of cost of overstepping the precautionary principle defined by laws on nuisance and biohazards and putting our environment and people at risk.

The consumer may believe the product is harmless, but takes the risk with his or her health, having to manage an accumulation of toxic burden, succumb to it, or somehow eliminate it and its effects.

ack of labeling: When companies do not exercise the "precautionary principle , and exercise deliberate "lack of disclosure," this subverts the decisionmaking process and democratic participation in a free country.

Regarding actual costs of Labeling:

I request that you look at two actual studies that were done on labeling. One done by Yo Kobayashi in Hawaii and the other prepared by Shepherd-Bailey, PhD Emory University School of Law <http://www.anh-usa.org/wp-content/uploads/2012/08/GE-Food-Act-Costs-Assessment.pdf>. They were submitted too late in the game for California Prop 37 against a 10:1 infusion of cash by the biotech industry to defeat the bill.

THE NEED OF CONSUMERS FOR LABELING IS NOW

New understandings have come to light regarding the theory and effects of

genetic engineering of living organisms, including consequences and risks of actual practices; and I am disturbed by the lack of accountability for human health risks and non-gmo farmers rights by the biotech companies regarding experimenting on whole populations without our knowledge or informed consent. I further find that manufacturers have not exercised the “precautionary principle” recognized across the planet by almost all the countries of the world but not enforced—simply putting cost above risks to human safety and health whether it be disclosure of what is put in our food, our pots and pans, our dishwear, our laundry detergents, our personal care products. Governments must step up to the plate on import and local production and manufacturing standards. The level of toxic burden put on new borns is astounding, let alone on growing children. Studies in the last year now shows Bt toxins have crossed the placenta to newborns, and are now revealed in the blood and urine of human beings.

Monday night Dr. Oz exposed that 40% of our foods were counterfeit food fraud abuses in labeling. This is aside from non-disclosure of genetically engineered foods. I find it quite clear the methods are still experimental in nature, and that promises of this field have much to still resolve and work out.

Further, “nondisclosure practices” by the biotech companies and manufacturers and the US federal government itself appear to be potentially thwarting or even violating the inalienable human rights of informed consent before being experimented on regarding something so basic as food. The right to protect our own genetics by which they can protect their own health from random disruptions to their regulatory systems of their own bodies and even their genetic lineages. This is now known to occur with novel proteins, subsequent discoveries of genes being turned on and off randomly in networks, and not just isolated to one gene to one gene trait, and the introduction of viruses undisclosed for years without adequate assessment or traceability mechanisms in place.

.The citizens of Hawaii are demanding disclosure, protections in place for their health and lands, and to exercise their inalienable right to not be experimented on without informed consent.

Citizens have requested our state to further take a stand to protect the rights of nature from extinction and harm, and protect those who cannot protect themselves, from babies and children, animals, pollenators, and the functioning our unique ecosystem in these islands. Their desire is to promote harmonious practices with the natural world and reduce and eliminate practices toxic to living species not only from the transport of imports into the state, but from within the state itself. Neither the United States government, biotech companies nor US manufacturers have taken steps to exercise or ensure the the "precautionary principal" adopted by nearly every single country around the

world, except the USA via the Cartagena Protocol on Biosafety and the addition of the Nagoya-Kuala Lumpur Supplementary Protocol that appear to have addressed the fact of damage to biodiversity or provisions for redress.

RE: SECTION V TIME FRAME The implementation of HB174 designated for 2050 is unreasonable given the biotech companies have aggressively managed to get 70-80% of our foods genetically engineered in the last 20 years while experimenting on our population without our consent or knowledge.

Our country is the least healthy of all of the industrialized nations given that more genetically engineered foods are served in the US than anywhere else in the world., Out of 190 countries the World Health Organization ranks the US #38. Waiting another 37 years is unreasonable given the number of countries that have "already" implemented labeling regimes.

I humbly request the legislators in the state of Hawaii, to take the lead in our nation in its willingness to take a stand along with all the other countries across the world by adopting the "precautionary principle" and shall set rules to prevent further risk of disruption to the regulatory systems of humans, and other amphibians, herbivores or carnivores, natural pollinators, to prevent extinction or other negative consequences to natural life forms. Request levels of reasonable and acceptable toxic burden shall be defined in law, and rules and regulations shall be updated as studies dictate.

Unmani Cynthia Groves

Health Care Practice Mgmt. Consultant to Professionals since 1985

unmanib@maui.net

Member:

Kihei Community Association Planning Committee

Alliance of Maui Community Associations

SW Maui Watershed Advisory,

Halau Ke'alaokamaile

HEALTH HAZARDS OF GM FOODS

Myth: GM foods are safe to eat

Truth: Studies show that GM foods can be toxic or allergenic

"Most studies with GM foods indicate that they may cause hepatic, pancreatic, renal, and reproductive effects and may alter haematological [blood], biochemical, and immunologic parameters, the significance of which remains to be solved with chronic toxicity studies." – Dona A, Arvanitoyannis IS. Health risks of genetically modified foods. *Crit Rev Food Sci Nutr*. 2009; 49: 164–175¹

Feeding studies on laboratory and farm animals show that GM foods can be toxic or allergenic:

- Rats fed GM tomatoes developed stomach lesions (sores or ulcers).^{2 3} This tomato, Calgene's Flavr Savr, was the first commercialized GM food.
- Mice fed GM peas (not subsequently commercialized) engineered with an insecticidal protein from beans showed a strong, sustained immune reaction against the GM protein. Mice developed antibodies against the GM protein and an allergic-type inflammation response. Also, the mice fed on GM peas developed an immune reaction to chicken egg white protein. The findings showed that the GM insecticidal protein acted as a sensitizer, making the mice susceptible to developing immune reactions and allergies to normally non-allergenic foods. This is called immunological cross-priming.⁴
- Mice fed GM soy showed disturbed liver, pancreas and testes function. The researchers found abnormally formed cell nuclei and nucleoli in liver cells, which indicates increased metabolism and potentially altered patterns of gene expression.^{5 6 7}
- Mice fed GM soy over their lifetime (24 months) showed more acute signs of ageing in the liver than the control group fed non-GM soy.⁸
- Rabbits fed GM soy showed enzyme function disturbances in kidney and heart.⁹
- Female rats fed GM soy showed changes in uterus and ovaries compared with controls fed organic non-GM soy or a non-soy diet. Certain ill effects were found with organic soy as well as GM soy, showing a need for investigation into the effects of soy-based diets (GM and non-GM) on health.¹⁰
- A review of 19 studies (including industry's own studies submitted to regulators in support of applications to commercialise GM crops) on mammals fed with commercialised GM soy and maize that are already in our food and feed chain found consistent toxic effects on the liver and kidneys. Such effects may be markers of the onset of chronic disease, but long-term studies, in contrast to these reported short- and medium-term studies, would be required to assess this more thoroughly. Such long-term feeding trials on GMOs are not required by regulators anywhere in the world.¹¹
- Rats fed insecticide-producing MON863 Bt maize grew more slowly and showed higher levels of certain fats (triglycerides) in their blood than rats fed the control diet. They also suffered problems with liver and kidney function. The authors stated that it could not be concluded that MON863 maize is safe and that long-term studies were needed to investigate the consequences of these effects.¹²
- Rats fed GM Bt maize over three generations suffered damage to liver and kidneys and alterations in blood biochemistry.¹³
- A re-analysis of Monsanto's own rat feeding trial data, submitted to obtain approval in Europe for three commercialised GM Bt maize varieties, MON863, MON810, and NK603, concluded that the maize varieties had toxic effects on liver and kidneys. The authors of the re-analysis stated that while the findings may have been due to the pesticides specific to each variety, genetic engineering could not be excluded as the cause.¹⁴

- Old and young mice fed GM Bt maize showed a disturbance in immune system cells and in biochemical activity.¹⁵
- Female sheep fed Bt GM maize over three generations showed disturbances in the functioning of the digestive system, while their lambs showed cellular changes in liver and pancreas.¹⁶
- GM Bt maize DNA was found to survive processing and was detected in the digestive tract of sheep. This raises the possibility that the antibiotic resistance gene in the maize could move into gut bacteria, an example of horizontal gene transfer.¹⁷ In this case, horizontal gene transfer could produce antibiotic-resistant disease-causing bacteria ("superbugs") in the gut.
- Rats fed GM oilseed rape developed enlarged livers, often a sign of toxicity.¹⁸
- Rats fed GM potatoes showed excessive growth of the lining of the gut similar to a pre-cancerous condition and toxic reactions in multiple organ systems.^{19 20}
- Mice fed a diet of GM Bt potatoes or non-GM potatoes spiked with natural Bt toxin protein isolated from bacteria showed abnormalities in the cells and structures of the small intestine, compared with a control group of mice fed non-GM potatoes. The abnormalities were more marked in the Bt toxin-fed group. This study shows not only that the GM Bt potatoes caused mild damage to the intestines but also that Bt toxin protein is not harmlessly broken down in digestion, as GM proponents claim, but survives in a functionally active form in the small intestine and can cause damage to that organ.²¹
- Rats fed GM rice for 90 days had a higher water intake as compared with the control group fed the non-GM isogenic (from same genetic background but without the genetic modification) rice. The GM-fed rats showed differences in blood biochemistry, immune response, and gut bacteria. Organ weights of female rats fed GM rice were different from those fed non-GM rice. The authors claimed that none of the differences were "adverse", but they did not define "adverse". Even if they had defined it, the only way to know if such changes are adverse is to extend the length of the study, which was not done.²²
- Rats fed GM Bt rice developed significant differences as compared with rats fed the non-GM isogenic line of rice. These included differences in the populations of gut bacteria – the GM-fed group had 23% higher levels of coliform bacteria. There were differences in organ weights between the two groups. The authors concluded that the findings were likely to be due to "unintended changes introduced in the GM rice and not from toxicity of Bt toxin" in its natural, non-GM form.²³
- A study on rats fed GM Bt rice found a Bt-specific immune response in the non-GM-fed control group as well as the GM-fed groups. The researchers concluded that the immune response in the control animals was due to their inhaling particles of the powdered Bt toxin-containing feed consumed by the GM-fed group. The researchers recommended that for future tests involving Bt crops, GM-fed and control groups should be kept separate.²⁴ This indicates that animals can be sensitive to very small amounts of GM proteins, so even low levels of contamination of non-GM crops with GMOs could be harmful to health.

In these studies, a GM food was fed to one group of animals and its non-GM counterpart was fed to a control group. The studies found that the GM foods were more toxic or allergenic than their non-GM counterparts.

Study findings such as those described above have made it increasingly difficult for GM proponents to claim that there are no differences between the effects of GM foods and their non-GM counterparts – clearly, there are.

To sidestep this problem, GM proponents often claim that statistically significant effects, such as those found in the above studies, are not "biologically relevant".

But this is not scientifically justified. In order to determine whether changes seen in these short- to medium-term studies are biologically relevant, the researchers would have to:

- Define in advance what “biological relevance” means in the context of the particular crop and test animal
- Extend the current study design from a medium-term to a long-term period to see how changes seen in the short-term experiments develop – whether they disappear or develop into disease or premature death.¹¹

This is not generally done.

Myth: EU research shows GM foods are safe

Truth: EU research shows evidence of harm from GM foods

A report published in 2010 by the European Commission called *A Decade of EU-Funded GMO Research (2001–2010)*²⁵ is often claimed to show that GM foods are safe. But this is untrue: some of studies included in the project, summarised below, show risks.

- A feeding trial on rats fed GM rice found significant differences in the GM-fed group as compared with the control group fed the non-GM parent line of rice. These included a higher water intake by the GM-fed group, as well as differences in blood biochemistry, immune response, and gut bacteria. Organ weights of female rats fed GM rice were different from those fed non-GM rice. Commenting on the differences, the authors said, “None of them were considered to be adverse”. But they added that this 90-day study “did not enable us to conclude on the safety of the GM food.”²² In reality, a 90-day study is too short to show whether any changes found are “adverse” (giving rise to identifiable illness).
- A study on rats fed GM Bt rice found significant differences in the GM-fed group of rats as compared with the group fed the non-GM isogenic (of a genetically similar background but without the genetic modification) line of rice. These included differences in the distribution of gut bacterial species – the GM-fed group had 23% higher levels of coliform bacteria. There were also differences in organ weights between the two groups, namely in the adrenals, testis and uterus. The authors concluded that the “possible toxicological findings” in their study “most likely will derive from unintended changes introduced in the GM rice and not from toxicity of Bt toxin” in its natural, non-GM form.²³
- A study on rats fed GM Bt rice found a Bt-specific immune response in the non-GM-fed control group as well as the GM-fed groups. This unexpected finding led the researchers to conclude that the immune response in the control animals must have been due to their inhaling particles of the powdered Bt toxin-containing feed consumed by the GM-fed group. The researchers recommended that for future tests on Bt crops, GM-fed and control groups should be kept in separate rooms or with separate air handling systems.²⁴

Myth: GM foods have been proven safe for human consumption

Truth: The few studies that have been conducted on humans show problems

GM foods are not properly tested for human safety before they are released for sale.^{26 19} The only published studies that have directly tested the safety of GM foods for human consumption found potential problems but were not followed up:

- In a study on human volunteers fed a single GM soybean meal, GM DNA survived processing and was detected in the digestive tract. There was evidence of horizontal gene transfer to gut bacteria.^{27 28} Horizontal gene transfer is a process by which DNA is transferred from one organism to another through mechanisms other than reproductive mechanisms.
- In a study on humans, one of the experimental subjects showed an immune response to GM soy but not to non-GM soy. GM soy was found to contain a protein that was different from the protein in non-GM soy. This suggests that GM foods could cause new allergies.²⁹
- A GM soy variety modified with a gene from Brazil nuts was found to react with antibodies present in blood serum taken from people known to be allergic to Brazil nuts. This indicates that this soy variety would produce an allergic reaction in people allergic to Brazil nuts.³⁰
- A study conducted in Canada detected significant levels of the insecticidal protein, Cry1Ab, which is present in GM Bt crops, circulating in the blood of pregnant women and in the blood supply of their foetuses, as well as in the blood of non-pregnant women.³¹ How the Bt toxin protein got into the blood is unclear and the detection method used has been disputed. Nevertheless, this study raises questions as to why GM Bt crops are being commercialised when research raises serious concerns about their safety and no systematic effort is under way to replicate and assess the validity of that research.

These studies should be followed up with controlled long-term studies and GM foods and crops should not be commercialised in the absence of such testing.

Myth: No one has ever been made ill by a GM food

Truth: There is no scientific evidence to support this claim

GM proponents claim that people have been eating GM foods in the United States for 16 years without ill effects. But this is an anecdotal, scientifically untenable assertion, as no epidemiological studies to look at GM food effects on the general population have ever been conducted.

Furthermore, there are signs that all is not well with the US food supply. Reports show that food-related illnesses increased two- to ten-fold in the years between 1994 (just before GM food was commercialized) and 1999.^{32 33} No one knows if there is a link with GM foods because they are not labelled in the US and consumers are not monitored for health effects.

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