

DAVID Y. IGE  
Governor

DOUGLAS S. CHIN  
Lt. Governor



SCOTT E. ENRIGHT  
Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER  
Deputy to the Chairperson

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

**BEFORE THE HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL  
PROTECTION AND AGRICULTURE**

**MARCH 20, 2018  
9:35 A.M.  
CONFERENCE ROOM 325**

**HOUSE CONCURRENT RESOLUTION NO. 231/HOUSE RESOLUTION NO. 201  
REQUESTING THE DEPARTMENT OF AGRICULTURE AND DEPARTMENT OF  
HEALTH TO CONDUCT A JOINT STUDY OF THE SHORT-TERM AND LONG-TERM  
EFFECTS OF CHLORPYRIFOS ON FARMWORKERS**

Chairperson Lee, Chairperson Creagan and Members of the Committees:

Thank you for the opportunity to provide testimony on HCR 231/HR 201 that requests the Departments of Agriculture and Health to conduct a joint study of the short-term and long-term effects of chlorpyrifos on farmworkers, with special and focused attention on the work environment and control of the environment for pregnant or possibly pregnant farmworkers, and to submit a report of their findings, recommendations, and proposed legislation no later than twenty days prior to the convening of the 2019 legislative session. The Department of Agriculture opposes these resolutions and offers the following comments.

The Hawaii Department of Agriculture does not have the staff, expertise, or resources to conduct an effective study of this kind. The study of farmworker populations to assess the association between pesticide exposure and health effects is an extremely complex undertaking. The ability to characterize long-term health outcomes, exposure variables, and confounders along with the ability to follow subjects over time present specific challenges in studying chronic health effects in farmworkers. In addition, the farmworker population in Hawaii that handles pesticides, particularly chlorpyrifos, and specifically women, especially those that may be pregnant, may be too small to serve as a basis for a statistically valid study.

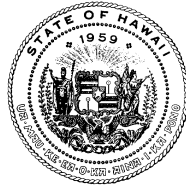
Chlorpyrifos sales in Hawaii have been decreasing over the last several years. Restricted Use Pesticide sales records submitted to HDOA Pesticides Branch show that Statewide, annual chlorpyrifos sales have decreased 64% since 2014. This includes a 42% decrease in Hawaii County, 71% decrease in Kauai County, 85% decrease in Honolulu County, and 88% decrease on Maui County.



In California, farmers use over one million pounds of chlorpyrifos per year. After conducting its own risk assessment, independent of that conducted by EPA, California did not ban chlorpyrifos. It did recently release Interim Recommended Permit Conditions for the use of the pesticide. These conditions limit chlorpyrifos application to certain setback distances of specific sites, and depend on the method of application, the application rate, and whether the site is occupied. The Department is currently in the process of restricting the use of all formulations of chlorpyrifos by reclassifying it to a State restricted-use pesticide (RUP) which will only allow it to be used by state-tested and certified applicators. Additionally, the Department will look to mirror further restrictions through the annual use permit such as regulated buffer zones. The revised State rules are anticipated to be finalized by this summer.

Thank you for the opportunity to provide comments on these resolutions.





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**DEPARTMENT OF HEALTH**  
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**Testimony in OPPOSITION to HCR 231 and HR 201**  
**REQUESTING THE DEPARTMENT OF AGRICULTURE AND DEPARTMENT OF**  
**HEALTH TO CONDUCT A JOINT STUDY OF THE SHORT-TERM AND LONG-**  
**TERM EFFECTS OF CHLORPYRIFOS ON FARMWORKERS**

REPRESENTATIVE CHRIS LEE, CHAIR  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

REPRESENTATIVE RICHARD P. CREAGAN, CHAIR  
HOUSE COMMITTEE ON AGRICULTURE

Hearing Date: March 20, 2018  
Time: 9:35 a.m.

Room Number: 325

1 **Fiscal Implications:** No funding is provided to implement this measure and the Department  
2 defers to the Governor's Supplemental Budget Request for appropriation priorities.

3 **Department Testimony:** The Department, while supporting the intent, respectfully opposes  
4 these resolutions. The resolutions request the Departments of Agriculture and Health to conduct  
5 a study examining short and long term effects of chlorpyrifos on farmworkers. The requested  
6 health and exposure study is beyond the Department's available resources and expertise. In  
7 discussions with expert colleagues at the 2017 Children's Environmental Health Forum, the  
8 comparatively low volume of chlorpyrifos applied in the State, relatively small population of  
9 Hawaii farmworkers exposed to chlorpyrifos, difficulty monitoring and tracking long term and  
10 the challenges of measuring subtle neurobehavioral effects in children years after the mother's  
11 exposure make Hawaii a difficult study setting.

12

13 The Department keeps abreast of current research on chlorpyrifos and routinely confers with  
14 expert external partners, including the Agency for Toxic Substance Disease Registry, the

1 Environmental Protection Agency, researchers and clinicians at the Western States Pediatric  
2 Environmental Health Specialty Unit, the Hawaii Poison Center and others. In addition, the  
3 Department regularly provides toxicological assistance assessing potential exposures to the  
4 Department of Agriculture. Farmworkers, pregnant women or others who have concerns about  
5 chlorpyrifos in their workplace or other exposures to chlorpyrifos may contact the Hawaii Poison  
6 Center 24 hours a day at 800-222-1222 and speak directly to RN's trained in medical  
7 toxicologists, pharmacists and medical toxicologists.

8

9 The Department concurs with EPA findings described in the November, 2016 "Chlorpyrifos  
10 Revised Human Health Risk Assessment," and supports steps by the Department of Agriculture  
11 to further restrict and carefully monitor usage of chlorpyrifos products licensed in Hawaii.  
12 Despite the lack of federal action, the current state of the science supports restrictions to reduce  
13 exposures to applicators, farmworkers, including those pregnant or possibly pregnant, as well as  
14 local communities that go beyond food tolerances to include workplace and bystander exposures  
15 from both general and restricted use products containing chlorpyrifos.

16

17 Thank you for the opportunity to testify on these resolutions.

**HCR-231**

Submitted on: 3/19/2018 9:08:12 AM

Testimony for EEP on 3/20/2018 9:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Melodie Aduja	Oahu County Committee on Legislative Priorities, Democratic Party of Hawai'i	Support	No

Comments:

**HCR-231**

Submitted on: 3/18/2018 7:41:32 AM

Testimony for EEP on 3/20/2018 9:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Henry Curtis	Life of the Land	Support	No

Comments:



# UNIVERSITY OF HAWAII SYSTEM

## Legislative Testimony

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Testimony Presented Before the  
House Committee on Energy and Environmental Protection  
And  
House Committee on Agriculture  
Tuesday, March 20, 2018 at 9:35 a.m.  
By  
Nicholas Comerford  
Dean, College of Tropical Agriculture and Human Resources  
And  
Michael Bruno  
Interim Vice Chancellor for Academic Affairs  
Vice Chancellor for Research  
University of Hawai'i at Mānoa

HCR 231/HR 201 – REQUESTING THE DEPARTMENT OF AGRICULTURE AND DEPARTMENT OF HEALTH TO CONDUCT A JOINT STUDY OF THE SHORT-TERM AND LONG-TERM EFFECTS OF CHLORPYRIFOS ON FARMWORKERS.

Chairs Lee and Creagan, Vice Chairs Lowen and DeCoite, and members of the House Committee on Energy and Environmental Protection and Committee on Agriculture:

Thank you for this opportunity to testify in support with comments for HCR 231/HR 201.

In general, we support the idea of continued study on all agricultural pesticides and their effect on the health of the Hawaiian citizenry. Our comments are directed on the accuracy of statements made in the resolution that should be corrected and to provide further detail on the CHARGE study and what it found that should help add to the discussion.

Comments:

Page 1 item 2: Should read that “chlorpyrifos pesticide drift CAN reach unsafe levels....”.

Page 1 item 3: Should read that “chlorpyrifos CAN be found at unsafe levels....”.

Page 2: To further expand on the CHARGE study, in addition to what the resolution says the study also found:

- Unfavorable genes and a lack of prenatal vitamin supplementation increased chance of autism by 7-fold.
- Warned of exposure to pesticides used on pets inside the home.



- Noted that folic acid supplements ameliorated the effects of pesticides (from outside or in the home).
- The CHARGE study did not address the influence of the range of hazardous chemicals found in dust in the home, which is becoming a major concern about health of children in homes. That interaction with Ag chlorpyrifos should be an important concern is a study like this.

We support the intent of HCR 231/HR 201 to study the short-term and long-term effects on farmworkers and pregnant women.

**HCR-231**

Submitted on: 3/19/2018 2:45:40 PM

Testimony for EEP on 3/20/2018 9:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Dale Sandlin	Hawaii Cattlemens Council	Oppose	No

Comments:

**HCR-231**

Submitted on: 3/19/2018 4:05:55 PM

Testimony for EEP on 3/20/2018 9:35:00 AM

**LATE**

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Erica Scott	Individual	Support	No

Comments: