

DAVID Y. IGE
GOVERNOR OF
HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

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SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

**Testimony of
SUZANNE D. CASE
Chairperson**

**Before the Senate Committees on
AGRICULTURE AND ENVIRONMENT
and
HIGHER EDUCATION**

**Tuesday, February 11, 2020
3:05 PM**

State Capitol, Conference Room 229

**In consideration of
SENATE BILL 2082
RELATING TO INVASIVE PLANT SPECIES CONTROL**

Senate Bill 2082 proposes to appropriate funds to the University of Hawaii to develop techniques to produce seedless plants for use in the ornamental plant industry. **The Department of Land and Natural Resources (Department) supports this measure provided that its passage does not replace or adversely impact priorities indicated in the Executive Supplemental Budget request.**

The Department recognizes the potential for imported ornamental plants to be invasive or to be associated with invasive species. The idea to develop sterile versions of invasive plant species could address the former issue, and if these sterile plants are produced in Hawaii it could help with the latter issue as well. The Department is a partner in the Hawaii Interagency Biosecurity Plan (HIBP), which encourages import replacement as one method to reduce the risk of introducing invasive species (HIBP action items PrePro2.2, PreTifs2.4).

The Department cautions against creating market interest in highly invasive plant species like miconia (referenced in SECTION 1 of this measure), species that are on the Hawaii Department of Agriculture's Noxious Weed List, or plants that have a high score on the University of Hawaii's Weed Risk Assessment. Creating a market demand for such species may make it difficult to regulate or discourage public interest in non-sterile varieties of those species.

Thank you for the opportunity to comment on this measure.



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Agriculture and Environment
and

Senate Committee on Higher Education
Tuesday, February 11, 2020 at 3:05 p.m.

By

Nicholas Comerford, Dean
College of Tropical Agriculture and Human Resources

And

Michael Bruno, PhD
Provost

University of Hawai'i at Mānoa

SB 2082 – RELATING TO INVASIVE PLANT SPECIES CONTROL

Chairs Gabbard and Kim, Vice Chairs Ruderman and Kidani, and members of Senate Committee on Agriculture and Environment and Senate Committee on Higher Education:

Thank you for the opportunity to submit testimony in support of SB 2082. The bill competently outlines the challenges that Hawai'i faces bringing in invasive species as ornamentals. The purpose of this bill is to fund development of infertile ornamental plants, in order to support the ornamental industry with new materials, while protecting the environment from invasive species.

Seedless or infertile plants can be developed from fertile plants by (1) selecting or breeding for double flowers, (2) induced mutagenesis, (3) wide hybridization, and (4) development of triploids. The newest potential for creating sterile plants comes from transgenic modification techniques.

The College of Tropical Agriculture and Human Resources (CTAHR), University of Hawai'i at Mānoa has produced such plants in the past and is active in doing so today. CTAHR's expert is Dr. Kenneth Leonhardt who is active in developing new sterile polyploids (more than one set of chromosomes), which are often sterile/infertile. The major technical bottleneck in identifying which offshoots are infertile is that it requires screening of many individuals, which requires technical staff.

If the desire of the legislature is to have sterile/infertile ornamental plants, then one strategy that would have an immediate impact is to fund the propagation and introduction of the species that Dr. Leonhardt has already converted to sterile forms. Due to lack of funds, he has not been able to take them to the introduction phase. Dr. Leonhardt's confirmed sterile plants and unconfirmed ones may be found in the listing at the end of this testimony.

A budget for one year to work on the introduction and to conduct evaluation work on the potential species is estimated to be \$97,000, which includes labor and supplies.

Thank you for the opportunity to testify in support of the bill. We support this bill provided that its passage does not replace or adversely impact priorities as indicated in our BOR Approved Budget.

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Sterile Clones</u> |
|-------------------------|----------------------------|-----------------------|
| Albizia saman | monkey pod tree (4N) | 2 |
| Cassia bakeriana | pink shower tree | 4 |
| Cassia fistula | yellow shower tree | 4 |
| Cassia javanica | pink and white shower tree | 6 |
| Cassia hybrids | no common name | 20 to 30 |
| Delonix regia | royal poinciana | 1 |
| Lagerstroemia hybrid | crape myrtle | 3 |
| Schefflera actinophylla | octopus tree | 4 |
| Spathodea campanulata | African tulip tree, orange | 1 |
| | African tulip tree, yellow | a few |

| <u>Sterility Unconfirmed</u> | <u>Common Name</u> | <u>Polyploid individuals</u> |
|------------------------------|----------------------|------------------------------|
| Albizia saman | monkey pod tree (3N) | 11 |
| Bauhinia monandra | pink orchid tree | 5 |
| Bauhinia variegata alba | white orchid tree | 1 |
| Calophyllum inophyllum | kamani | 2 |
| Cenna leptophylla | no common name | 6 |
| Clusia rosea | autograph tree | 2 |
| Erythrina crista-galli | coral tree | 6 |
| Heritiera littoralis | mirror tree | 6 |
| Pachira aquatica | Malabar chestnut | 3 |
| Thespesia populnea | milo | 2 |

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

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**TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEES ON AGRICULTURE AND ENVIRONMENT
AND ON HIGHER EDUCATION**

**FEBRUARY 11, 2020
3:05 P.M.
CONFERENCE ROOM 229**

**SENATE BILL NO. 2082
RELATING TO INVASIVE PLANT SPECIES CONTROL**

Chairperson Gabbard, Chairperson Kim, and Members of the Committees:

Thank you for the opportunity to testify on Senate Bill 2082, relating to invasive plant species control. The bill appropriates funds from the general fund for fiscal year 2020-2021 to be expended by the University of Hawai'i College of Tropical Agriculture and Human Resources to develop or identify a substitute for invasive plant species. The Department supports the intent of this measure.

Invasive species are a primary threat to Hawai'i's agriculture, environment, and economy. Funding for research on invasive species is critical to ensure that appropriate responses can be developed which mitigate the negative impacts on the State's agriculture, environment, and economy. This measure seeks to develop non-invasive plant varieties which can substitute for existing invasive species in landscaping, which would in turn be beneficial by decreasing the number of invasive plants in the environment.

Thank you for the opportunity to testify on this measure.



SB-2082

Submitted on: 2/11/2020 4:08:28 AM

Testimony for AEN on 2/11/2020 3:05:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|-----------------------------------|---------------------------|---------------------------|
| Brian Miyamoto | Testifying for Hawaii Farm Bureau | Support | Yes |

Comments:

SB-2082

Submitted on: 2/4/2020 12:29:52 AM

Testimony for AEN on 2/11/2020 3:05:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------------------|---------------------|---------------------------|---------------------------|
| Jennifer Azuma Chrupalyk | Individual | Support | No |

Comments:

SB-2082

Submitted on: 2/8/2020 12:54:22 PM

Testimony for AEN on 2/11/2020 3:05:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Andrea Quinn | Individual | Support | No |

Comments:

Dear Honorable Committee Members:

Please support SB2082. Hawaii is known as the “endangered species capital of the world” due in large part to invasive species. We must do what we can to protect Hawaii's fragile ecosystem.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihei