



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Agriculture and Environment
and

Senate Committee on Higher Education
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By

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And

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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