

UNIVERSITY OF HAWAI'I SYSTEM

Legislative Testimony

Testimony Presented Before the

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Hermina M. Morita, Chair Rep. Mele Carroll, Vice Chair

DATE: Thursday February 1, 2007 TIME: 8:00 a.m. PLACE: Conference Room 312 State Capitol 415 South Beretania Street

By James Gaines Interim Vice President for Research University of Hawaii

RE: Testimony In Opposition of HB704

Aloha Chair, Vice Chair, and Members of the Committee:

Thank you for the opportunity to provide **testimony in opposition to HB704** which provides for a 10-year moratorium on testing, propagating, cultivating, growing, and raising genetically engineered coffee and taro in Hawaii.

The University of Hawaii's history of supporting agriculture and farming in Hawaii goes back to the beginning of the last century and its contributions to those activities are well documented. As the primary research organization of the State of Hawaii, the university is sensitive to legislation that may impede its research and educational mission especially when such legislation is proposed on the basis of the unknown or untested consequences resulting from these activities.

The proposed, ten-year moratorium on testing, propagating, cultivating, growing, and raising genetically engineered coffee and taro in the State of Hawaii is both short-sighted and unnecessary. The primary effect of such an action would put the Hawaiian coffee and taro crops at risk in two ways. First the momentum of research in this area would cease and our faculty researchers would be forced to move in to other areas of inquiry. More problematic however would be the State's inability to address a sudden and/or rapidly spreading outbreak of plant disease or invasive species that may attack our taro or coffee crops.

Invasive species pose constant challenges to the agriculture industry as well as the environment in Hawaii. The continual inflow of invasive species is unpredictable and may have far-reaching effects. The current situation with indigenous wili wili (*Erythrina sandwiciensis*) trees being decimated by an invasive gall-wasp species is a good illustration. Taro is also prone to effects of invasive species, particularly plant diseases. Currently, the Alomae/Bobone Virus Disease Complex is decimating taro production in Papua New Guinea and the Solomon Islands, and there are no known varieties of taro that are resistant to this virus complex. The University

conducts research on such issues and has contributed significantly to the protection of agriculture in the State through such actions.

Development of a transgenic plant may take five to seven years to perfect. Most of this work is conducted in laboratories and green houses precisely so that any adverse effects or undesirable characteristics are examined and evaluated before field trials begin. In addition, there is an extensive permitting process under the US Department of Agriculture with oversight by the Hawaii Department of Agriculture that must be undertaken before any engineered plant is allowed to be tested in the field.

Most importantly, we find this bill to be overly restrictive and anathema to the knowledge-based economy that so many people in our state are trying to develop. Instead of empowering our people to create new knowledge and ideas through research and innovation, HB704 impedes the progress of science and places artificial constraints on the ingenuity and creativity of our people. A moratorium on research does little to protect coffee or taro, but it may significantly impact our ability to move forward and discover new methods that may help these crops in the future.

Mahalo for your consideration,