

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 HB1048

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

Thank you for the opportunity to provide **testimony in opposition to HB1048** which prohibits the growing of crops that produce pharmaceuticals and laboratory work relating to biopharmaceutical crops.

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 prohibition on research and growing of pharmaceutical crops in Hawaii is unnecessary as there <u>are significant federal regulations</u>, with state oversight, already in effect to control and monitor such activities.

Moreover, as the State of Hawaii turns its attention to the <u>development of a knowledge-based</u> <u>economy</u> a fear-based bill such as HB1048 would criminalize research into <u>one of the most</u> <u>promising pharmaceutical manufacturing techniques available today</u>. Using plant-based production the cost of certain therapies could be reduced by an order of magnitude or more, making better healthcare outcomes available to everyone.

For example, a Canadian company, SemBioSys, recently announced their success with <u>producing human insulin in safflower</u> (http://www.isb.vt.edu/articles/oct0605.htm). Their technology can produce over one kilogram of insulin per acre of safflower production, which is enough to supply 2,500 patients for one year of treatment. They believe that they <u>could meet the world's total projected insulin demand in 2010 with less than 16,000 acres of crop production.</u>

This technology holds great promise for Hawaii as the <u>connection between our traditional</u> <u>agriculture industry intersects with our growing innovation industry</u>. Instead of encouraging and empowering our people to create new knowledge and ideas through research and innovation, SB1048 impedes the progress of science and places artificial constraints on the ingenuity and creativity of our people.

Mahalo for your consideration,