Testimony Presented Before the
Senate Committee on Agriculture and Environment
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## SB 1544 – RELATING TO AGRICULTURE

Chair Gabbard, Vice Chair Ruderman and members of the Senate Committee on Agriculture and Environment:

Thank you for the opportunity to testify on SB 1544 relating to agriculture with the purpose of promoting whole farm systems and the education of farmers in those systems. The University of Hawai'i at Mānoa, College of Tropical Agriculture and Human Resources (CTAHR) <u>supports with amendment</u> the intent of this bill and we respectfully provide the following information to substantiate our position.

The economic and sustainable practice of agriculture encompasses a number of central concepts that can be found in any sustainable farm system. These include: appropriate timing of farming methods and applications, conservation tillage, cover cropping, crop rotation, and appropriate scale of operation.

Agriculture has decades of experience in defining sustainable agriculture. The practices above are designed to overcome the mistakes made in the past. While the Green Revolution was, indeed, a revolution that brought us the ability to produce more food and feed the U.S. population at low cost compared to the rest of the world; it also brought us increased soil erosion and adverse environmental effects.

The above-mentioned practices have another thing in common. They are well-researched and supported through decades of experimentation. This bill does the following:

1. It gives the Hawai'i Department of Agriculture the responsibility of establishing a farmer apprentice mentoring program that will teach farmers how to improve soil health. CTAHR strongly supports this intention. Soil health is the key to

sustainable farming, soil organic matter is the key to soil health. The CTAHR GoFarm program is one example of such a program working state-wide that the department may want to look at as a model.

2. It requires the program to recycle locally available organic, diverse plant and animal agricultural nutrients, etc. The well-defined agricultural practices mentioned above meet these needs when done properly. Cover crops use plant and nutrient sources to soil build organic matter. Including livestock in the cropping rotation returns as much as 70% of the nutrients that livestock eat to the soil in an available form for the next crop. Manures can be worked into the soil if done properly. There is a wealth of data on organic and conventional farming systems that have passed the test of critical evaluation over time; and should be part of a well-designed training program.

CTAHR's criticism of this bill is that CTAHR does not support the teaching of Korean Natural Farming for crop production as a well-accepted farming practice, at this time. The bill states that CTAHR would define that system. The college will define it as not an approved agricultural system to be used in teaching future farmers at this time. We clarify the previous statement using "at this time". This system is poorly researched and poorly documented. CTAHR does not approve of teaching methods that are hearsay or based on personal testimonies. At that time, when this system passes the test of critical evaluation, CTAHR believes that this could be incorporated into appropriate training programs.

We support the intent of this bill and, if Korean Natural Farming is dropped from it as a responsibility of CTAHR, we offer strong support.

Thank you for the opportunity to submit testimony.