Our global economy allows plant germplasm to be quickly traded across regions, countries, and continents. Unfortunately, pathogens responsible for important agricultural diseases sometimes accompany this germplasm, leading to new disease outbreaks which threaten the agricultural security of a region. This is of particular concern in the tropical Pacific where many important agricultural crops (such as banana/plantain, citrus, kava, sweet potato, taro, and yam) are propagated by cuttings, grafting, or other vegetative means. Because these crops do not go through a seed stage, they are unable to “cleanse” themselves from these important pathogens, and the diseases they cause. To combat these threats, many countries are developing and implementing biosecurity plans. An important component of these plans are the development of clean germplasm for vegetatively-propagated crops which benefit growers by increased agricultural production, and also help reduce the risk of introducing foreign pathogens and diseases into a region.

Michael Melzer is an Assistant Researcher at the College of Tropical Agriculture and Human Resources who has been studying agricultural pests and diseases in Hawaii for over 15 years. He currently oversees the University’s Agrosecurity Laboratory, which develops and performs plant pest diagnostics and conducts surveys throughout Hawaii for exotic pests and pathogens that threaten our food security. He is also part of the United States Department of Agriculture’s “National Clean Plant Network”, an association of clean plant centers, scientists, regulators, and educators dedicated to the development and distribution of pathogen-free plant germplasm.

We are firm believers in food-based learning. Excellent refreshments will be served. Please bring your own cup, plate/bowl and utensil. The public is invited to attend.