



Kellie Taguchi

Dr. Charles Kinoshita

College of Tropical Agriculture & Human Resources

University of Hawai'i at Mānoa

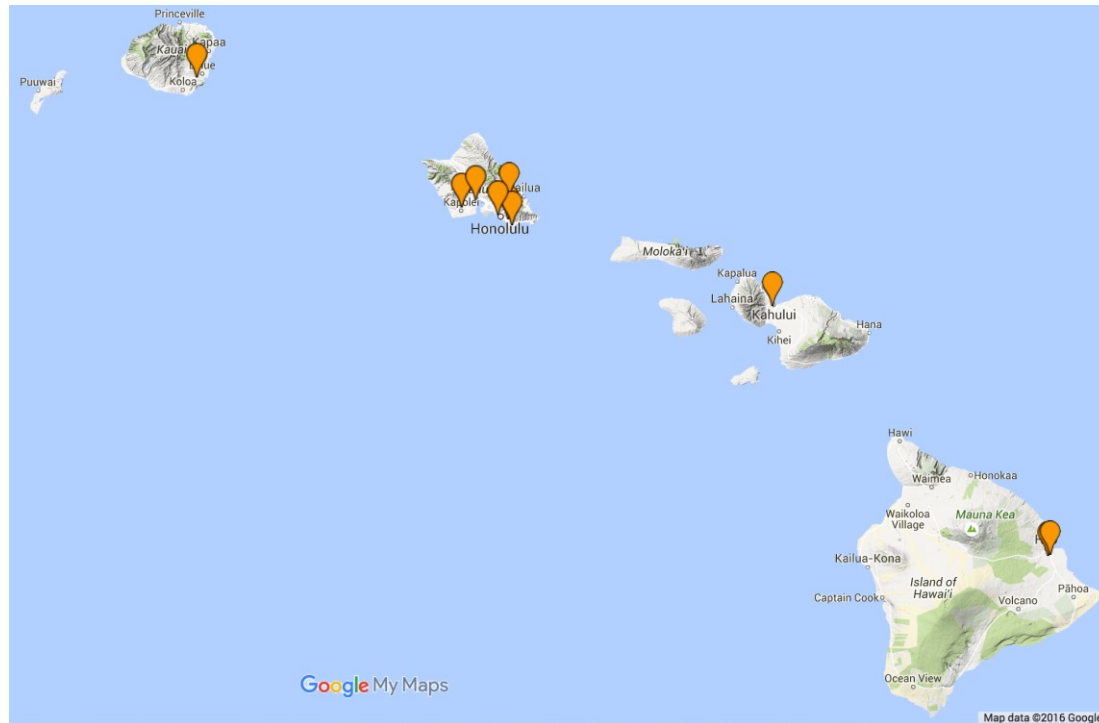


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A close-up photograph of a beehive entrance on the left, with a large number of bees. On the right, there are several white flowers with pink centers and green leaves. The text is overlaid on the left side of the image.

Bee Smart:

The Buzz on Pollination and Pollinators



Pollinator Threats

Objectives

In this segment you will learn about:

- the common threats to pollinators
- the threats to honeybee and its impact

Resources:

To learn more, check out some additional resources:

- [Deformed Wing Virus FAQ by The UH Honeybee Project](#)
- [Biology of the Varroa Mite by The UH Honeybee Project](#)
- [Threats to Honeybee Health by The UH Honeybee Project](#)

Bee Smart: The Buzz on Pollination and Pollinators

Pollinator Threats

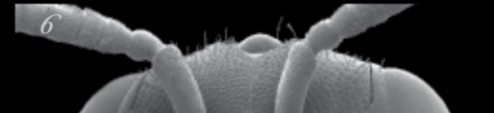
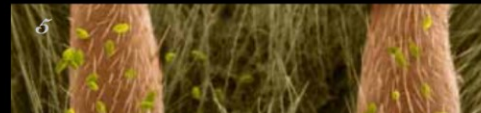
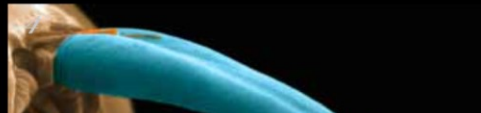
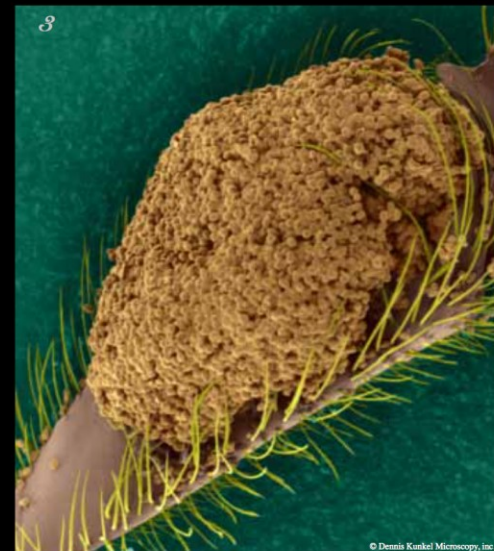


Pollination Up Close

Pollination is important because it leads to the production of fruits we can eat, and seeds that will create more plants. Pollination begins with flowers. Flowers have male parts that produce very small grains called pollen. Pollination is the transfer of pollen grains from one flower to another.

Many insects help move pollen between flowers and act as "pollinators". Butterflies, moths, bees, and flies are examples of insect pollinators. When a pollinator visits a flower it is looking for food but while feeding these insects accidentally transfer pollen grains between flowers and help the plants produce fruits and seeds.

The images below were taken using a scanning electron microscope and show the microstructure details of insect pollinators and of the pollen they help transfer.



In 2010, another bee parasite, the small hive beetle (*Aethina tumida*), has now invaded the islands and is contributing to large colony losses among the local beekeepers. The warm, humid weather seems to favor beetle reproduction and may be contributing to the explosive beetle population levels recorded on the Hawaiian Islands. We are working directly with beekeepers and small scale farmers to promote management strategies to reduce colony collapse due to beetle infestation, and to promote pesticide free control against this new parasite.





THE
UH HONEYBEE PROJECT



COLLEGE OF TROPICAL AGRICULTURE
AND HUMAN RESOURCES
UNIVERSITY OF HAWAII AT MĀNOA

