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Why the need?

- The Asian citrus psyllid, *Diaphorina citri* (or ACP), poses a serious threat to California's (CA) citrus industry—including those grown in home gardens.
- The psyllid feeds on all varieties of citrus (e.g., oranges, grapefruit, & lemons).
- The psyllid damages citrus directly by feeding on new leaf growth (flush) and are incredibly difficult to scout with the untrained eye.
- ACP is a vector of the bacterium *Candidatus Liberibacter asiaticus*, associated with the fatal citrus disease huanglongbing (HLB), also called citrus greening disease.
- HLB can kill a citrus tree in as little as five years, and there is no known cure and the disease has been in CA since 2012.
- ACP is widely distributed throughout CA and is becoming more widespread in Southern CA.

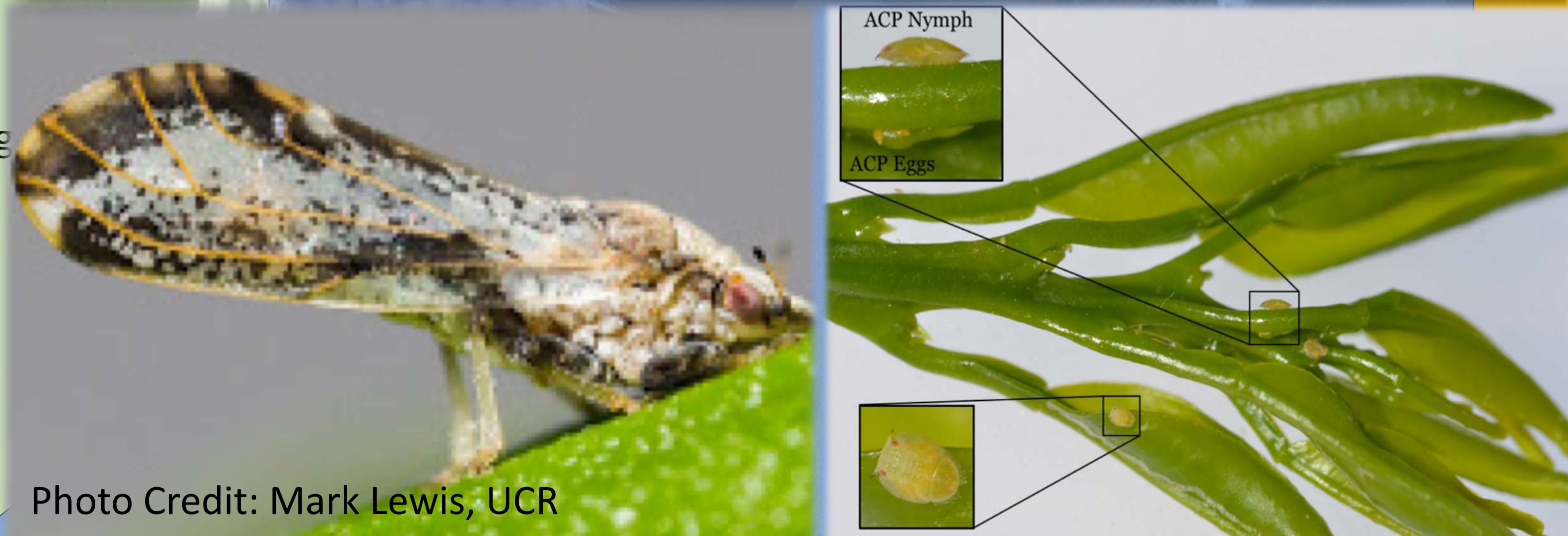


Photo Credit: Mark Lewis, UCR

Objectives

- 1) Being pro-active and familiarize local growers, homeowners, and other citrus stakeholders in effort to manage and reduce the potential impacts of HLB in southern CA by extending research-based and educational informative handouts, presentations, and offer hands-on learning opportunities.
- 2) To conserve commercial citrus groves in southern CA by reducing the spread of HLB and ACP.
- 3) To properly teach stakeholders how to scout and identify all the life stages of ACP in the field.



Photo Credit: Catlin Budwood



Activities

- Website – develop and managed San Diego County ACP and HLB resource and contact information for the UC Cooperative Extension, San Diego, UC subtropical Fruit, and Master Gardener website.
https://ucanr.edu/sites/alternativefruits/Asian_Citrus_Psyllid/
- Handouts – Printed and dissemination informational handouts (Grafton-Cardwell et. al) to trainees and at outreach events.
- Outreach Events – Interfaced with public and private stakeholders participated in several outreach events where our educational display board was presented and UCCE handouts were disseminated (approximately ~200 handouts).
 - San Diego Farm & Nursery Expo – Nov. 14, 2018
 - San Diego UCCE Master Gardener Seminar- Healthy
 - Garden Healthy Home Free Community Workshop – Feb. 23, 2019
 - San Diego County Fair June 2nd, 12th, and 26th, 2019

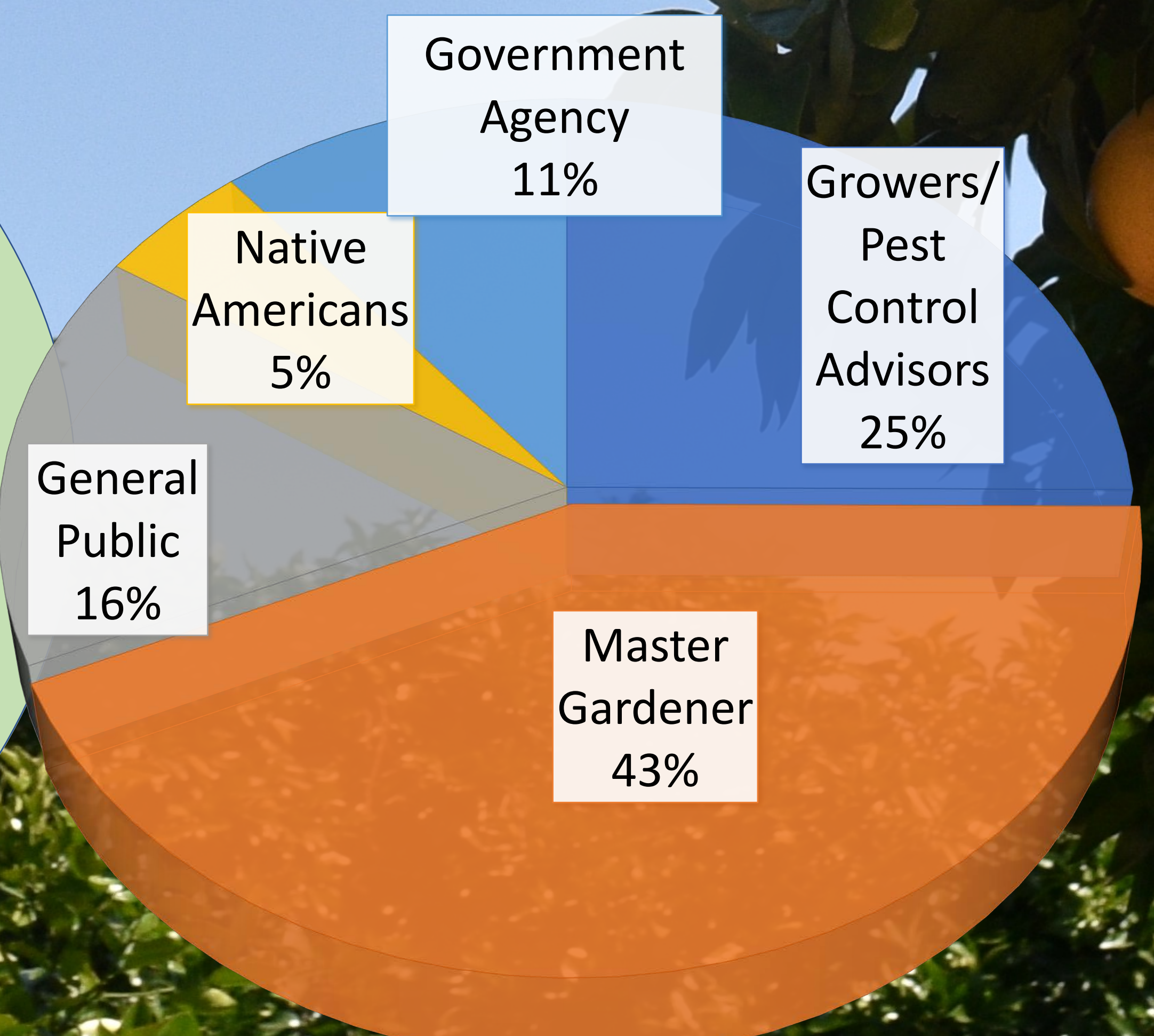
Workshops and Training (total of approximately ~ 291)

- Organized 5 ACP grower scouting field days (106 participants)
- 4 Master Gardener ACP grower scouting field days ACP/HLB (46 participants)
- 2 classroom style lecture/trainings (60 participants)
- 2 Master Gardener half-day train-the-trainer workshops (80 participants).

Trainees which included: UCCE Master Gardeners, government agencies such as CDFR/USDA, growers, homeowners and Pest Control Advisors.

Classroom training with Rincon Band of Luiseño Indians Tribe in Pauma Valley on July 11, 2019 (This was the first time any government agency was allowed on premises.)

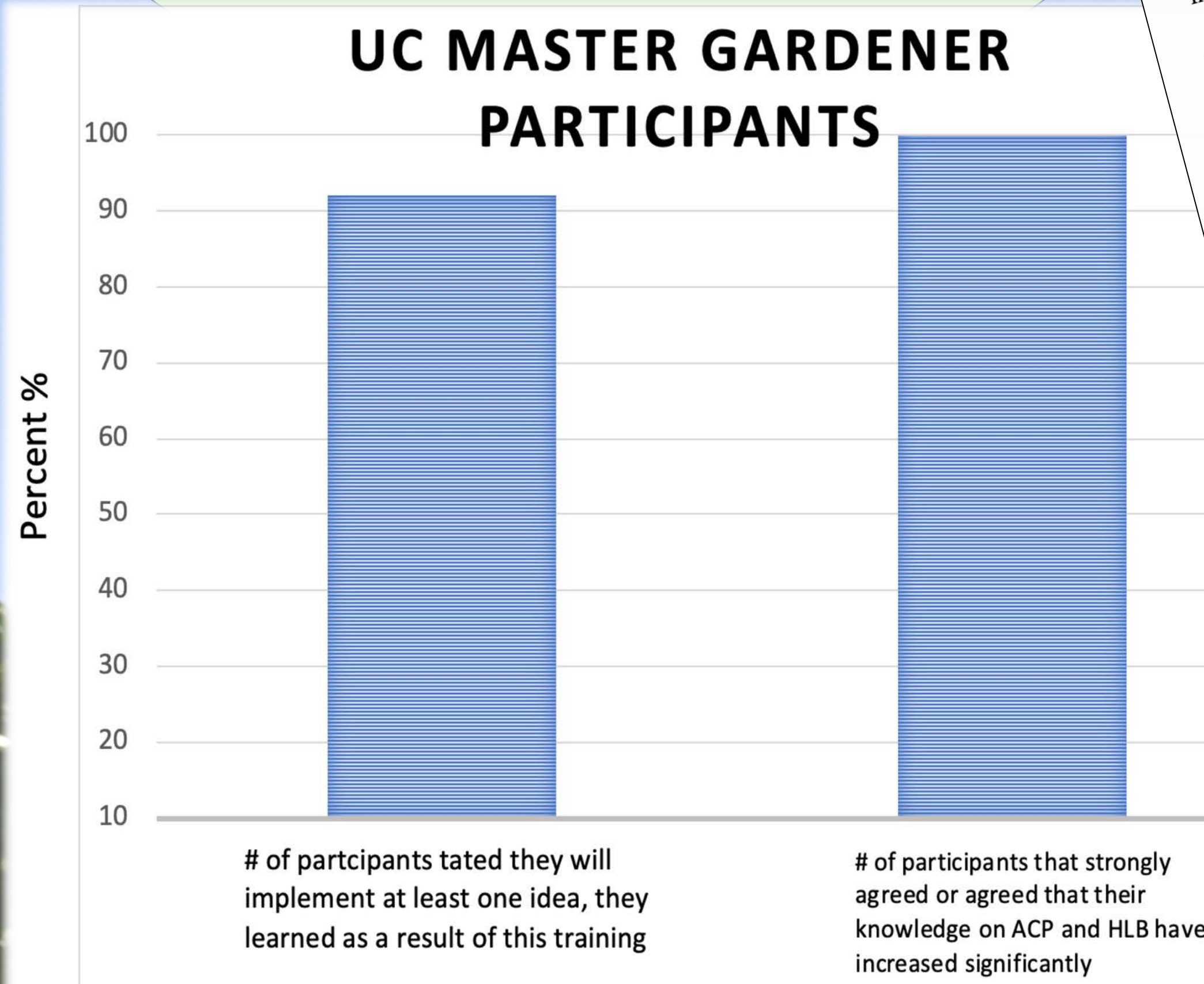
2018-2019 ASIAN CITRUS PSYLLID OUTREACH AND EXTENSION TRAINING PARTICIPATION IN RIVERSIDE & SAN DIEGO COUNTIES N= 291



Results & Impacts

- There was a total of approximately ~225 trainees which included Master Gardeners, government agencies members such as California Dept. of Food & Agriculture and United States Dept. of Agriculture, growers, crop consultants, homeowners and pest control advisors that participated in outreach training.
- Within the 291 participants, 99% of the participants strongly agreed or agreed that their knowledge on ACP/HLB, and pest identification have increased significantly.
- By increasing learning and behavior change amongst stakeholders to improve agriculture efficiency, probability, and increase ecological sustainability.

UC MASTER GARDENER PARTICIPANTS



Paper Survey Questions
N=126

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