

WHITE PEACH SCALE IN PAPAYA

Pseudaulacaspis pentagona

Native to China / Japan – maybe Italy?? Introduced to US in early 1900's

Pest of many crops – peaches, citrus, woody ornamentals, passion fruit, papaya in HI

Initially detected in HI in 1997; only present on the Big Island so far...

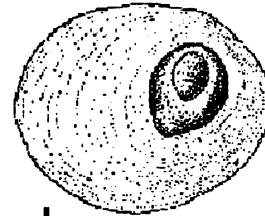
Life cycle and biology

Has more than four generations per year in Florida – may be as many as eight in Hawai'i

Up to 100 eggs per female, hatch within 4 days, crawlers emerge

Females release pheromone to attract males

Do not disperse rapidly



Female



Male



CRAWLERS



Male scales

Aphelinid wasp parasitizing insect



Dense infestation on papaya

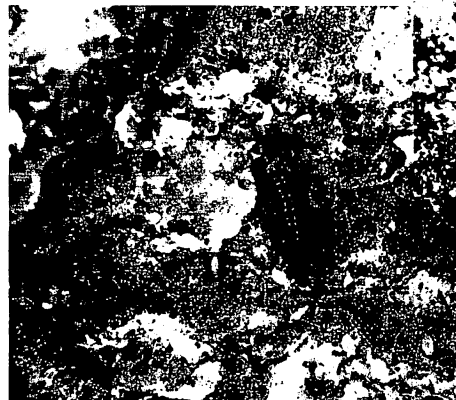
Controlling WPS

Worldwide: biological control can be effective

In Europe – Tiny wasps (Aphelinidae spp.) used since early 1900's

Two have been effective in Italy – *Encarsia berlesei* and *Pteroptrix orientalis*

Predatory insects, such as ladybugs, can also help control WPS



A predatory ladybug beetle larva (Coccinellid) eating crawlers