

2º SEMINARIO INTERNACIONAL DE PALTOS

29 • 30 DE SEPTIEMBRE
1º DE OCTUBRE • 2004

NUEVAS PLAGAS EN CALIFORNIA


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SOCIEDAD GARDIAZABAL Y MAGDAHL LTDA.

Avocado Production in California

- CA produces 90% of all avocados in the USA
- San Diego produces 45% of the annual crop by value
- Hass cultivar accounts for 85% of harvested fruit
- Approx. 6000 growers producing 165,000 tons of fruit on 58,000 acres
- Crop worth \$340 million



Avocados are grown from San Luis Obispo to San Diego

Two introductions have had a major impact on how avocado growers manage their groves



Avocado Thrips

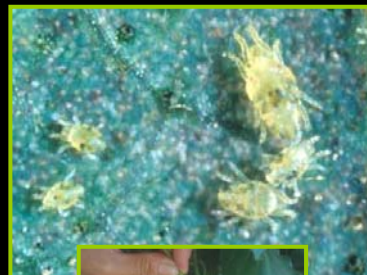


Persea mite

Industry has needed to shift from predominantly low insecticide usage and reliance on Biocontrol to chemical applications

Persea Mite, *Oligonychus perseae*

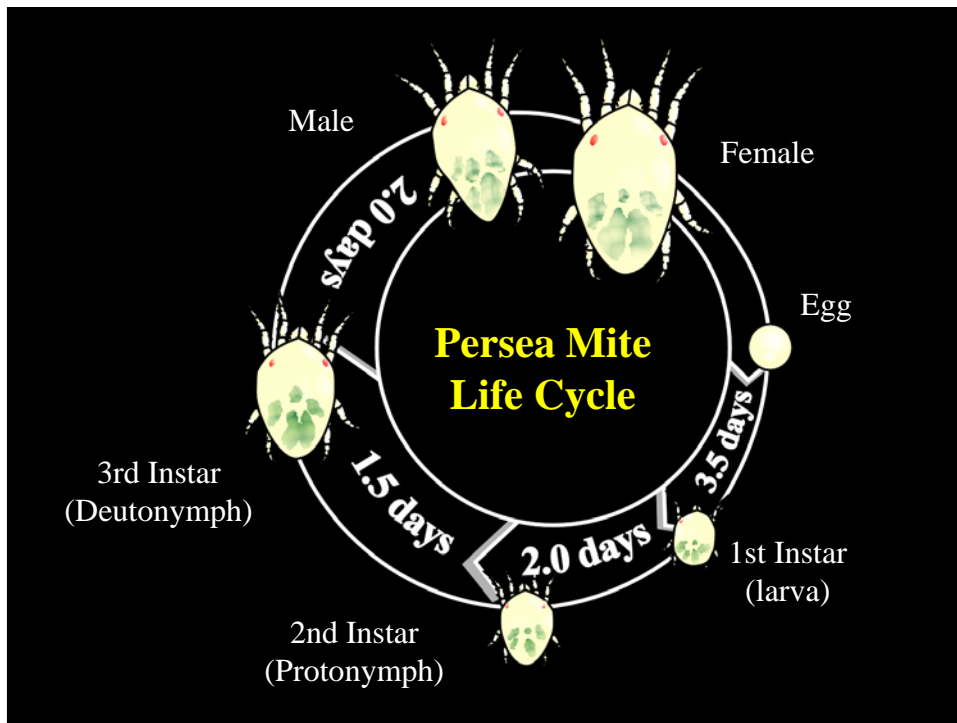
- An exotic pest in California, arrived in 1990
- Originally described from specimens collected from avocados being smuggled from MX to USA
- Native to Mexico
- A pest in Costa Rica & Israel
- Mites feed in nests on undersides of leaves and when leaf damage ~ 10% leaves drop



Persea Mite Feeding Damage



When mite feeding damages ~ 10% of the leaf surface the probability of leaf drop increases significantly

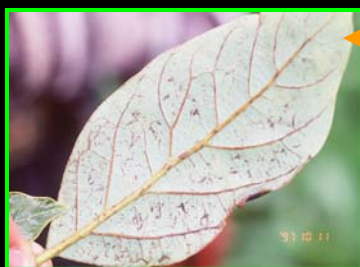


Avocado Thrips, *Scirtothrips perseae* Nakahara (Thysanoptera: Thripidae)

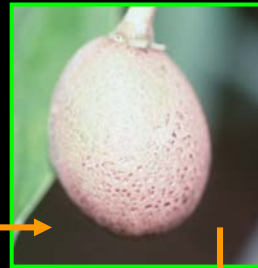
- First discovered in CA in 1996 near Port Hueneme in Ventura Co.
- Similar to specimens found on smuggled avocados from Oaxaca at the Port of San Diego in 1971
- Undescribed species when first discovered. Officially named in 1997
- Appears to be monophagous in CA and native to Mexico & Guatemala



Avocado Thrips Feeding Damage



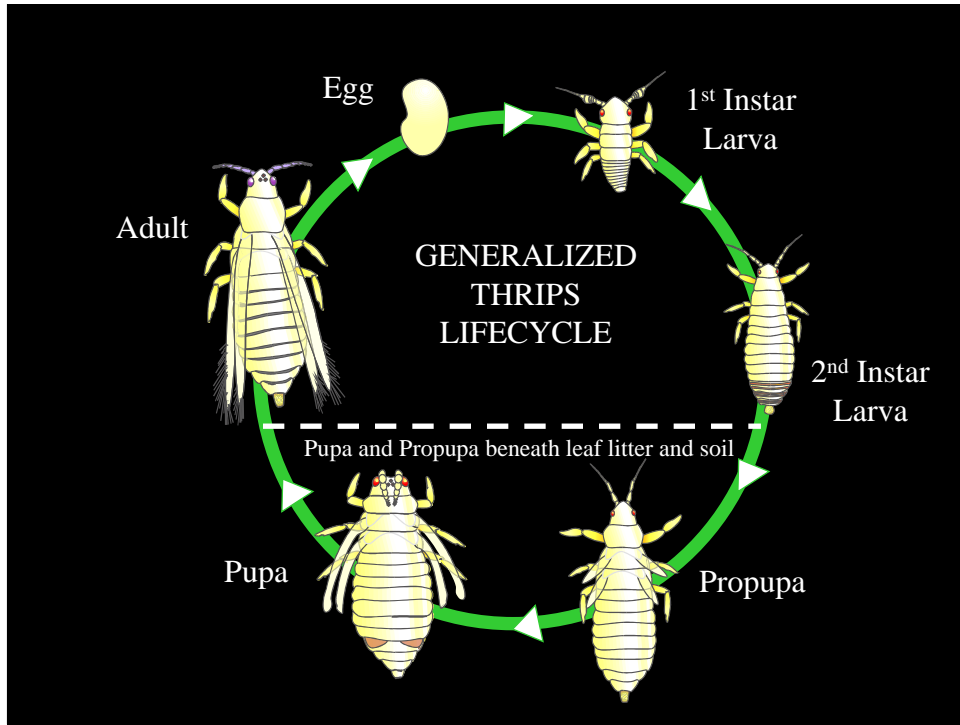
Leaf scarring



"Alligator Skin" on small and mature fruit

Elongate scarring on maturing fruit





**Further Information on Biological
Control of California Avocado Pests**

Mark Hoddle website (UC, Riverside)

www.biocontrol.ucr.edu

www.avocadosource.com