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

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
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
Distribution of Avocado Thrips *(Scirtothrips perseae)* in Central America

* S. *perseae* replaced by new *Scirtothrips* sp. in Costa Rica

Not found in Caribbean

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Reuben Hofshi (September 2004)
Further Information on Biological Control of California Avocado Pests

Mark Hoddle website (UC, Riverside)

www.biocontrol.ucr.edu

www.avocadosource.com