# **UC Pest Management Guidelines**

# AVOCADO SIXSPOTTED MITE

Scientific Name: Eotetranychus

sexmaculatus

(Reviewed: 7/01, updated: 7/01)



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#### **DESCRIPTION OF THE PEST**

Adult mites are tiny, about 1/75 inch (0.3 mm) long and oval in shape. Generally they are lemon yellow in color with about six black spots on the abdomen. Females lay tiny, globular, pearly white, stalked eggs on leaf surfaces or attached to the webbing produced by this mite. In a period of 10 to 20 days, females may lay 25 to 40 eggs. Eggs require 5 days to 3 weeks to hatch, depending on temperature. In summer, mites reach maturity in 8 to 12 days. Populations tend to be heaviest in spring and early summer.

#### DAMAGE

Sixspotted mite may become a pest in avocado orchards when chemical sprays used to control other pests disrupt biological control of this mite. On avocado leaves sixspotted mites attack only the <u>lower surface of the leaf</u>, concentrating their activity along the midrib and larger veins. Infested areas become brownish to purplish in color and severe infestations cause defoliation. These mites produce webbing but not as much as persea mite.

#### **BIOLOGICAL CONTROL**

These mites are generally kept under control by predaceous

mites ( <u>Galendromus helveolus</u>, when it is released for control of persea mite, and <u>Euseius hibisci</u>) and <u>sixspotted thrips</u> (*Scolothrips sexmaculatus*). <u>Euseius hibisci</u>, which can maintain and increase populations on pollen in the absence of live prey, is the major controlling factor.

## **CULTURAL CONTROL**

Encourage predaceous mites by controlling road dust. Oil or pave main orchard roads. If it is necessary to use dirt roads for a particular activity, use a water truck or trailer to prevent dust, especially during summer months when heat convection currents carry dust well up into the tree canopies. Individual backyard trees can be hosed down in early to mid-summer to remove dust and enhance biological controls. Areas subject to drying east winds are less prone to attack from this mite, as it prefers higher humidity.

#### ORGANICALLY ACCEPTABLE METHODS

Biological and cultural control and sulfur or oil sprays.

## **MONITORING and MANAGEMENT DECISIONS**

Sixspotted mites are rarely a problem in San Diego and Riverside counties because of a relatively dry climate; avocado trees growing in foggy areas near Morro Bay and Santa Barbara are more likely to experience problems with this mite. In coastal areas protected from drying Santa Ana winds, monitor for this mite by sampling interior canopy leaves. Inspect the underside of the leaf with a hand lens for mite activity along the midrib and lateral veins. Spot treatments of sulfur or narrow range oil are occasionally required in warmer, humid growing areas.

# TREATMENT Pesticide (commercial name

Amount/Acre

P.H.I.+ (days)

- A. WETTABLE SULFUR# Label rates 0
  COMMENTS: Restricted entry interval: 1 day. Do not treat
  with sulfur when temperatures exceed 90°F to avoid leaf
  damage. Sulfur sprays are often not effective in coastal areas
  where temperatures do not promote fuming action.
- B. NARROW RANGE OIL# Label rates 0 COMMENTS: Restricted entry interval: 4 hours. Requires good coverage to be effective.
- Preharvest interval. Do not apply within this many days of harvest.
- # Acceptable for use on organically grown produce.

## PRECAUTIONS

# **PUBLICATION**



UC IPM Pest Management Guidelines: Avocado UC ANR Publication 3436

Insects and Mites

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