Citrus—Citrus Thrips Monitoring

Supplement to UC IPM Pest Management Guidelines: Citrus

ipm.ucanr.edu

Grower: _____ **Block:** _____ **Date:** _____

Comments: _____

Monitor from petal fall until fruit is greater than 1.5 inches in diameter. For oranges and lemons in the San Joaquin Valley, the monitoring time is about six to eight weeks in spring after petal fall. For lemons in the coastal region, monitor June through October.

How to monitor citrus thrips

1. Examine young fruit for immature citrus thrips.
2. Select trees that are three to four rows in from the outside edge of the block.
3. Sample 25 fruits from each corner of the block for citrus thrips (a total of 100 fruits).
4. Take only one to two healthy, dark green fruit from outside, sunny branches of each tree. Look for the thrips on the stem end of each fruit under the calyx. Count a fruit as infested only if it has one or more wingless first- or second-instar nymphs (ignore pupae and adults).
5. Record the total number of fruits infested with immature citrus thrips and calculate the percentage of infested fruits.
6. On very susceptible varieties, such as San Joaquin Valley navels and clementines, monitor fruit at least twice a week after petal fall, and continue monitoring as long as susceptible fruit is on the tree.
7. Treatment thresholds vary by growing region, cultivar, beneficial mite populations, the type of material that will be applied, and whether the orchard is sheltered from wind damage (lower threshold) or has a history of outside fruit scarring from seasonal winds (higher threshold). As fruit gets larger, treatment thresholds go up. Less susceptible varieties, such as Valencia oranges, and Tango or W. Murcott mandarins, may not require monitoring or treatment.

How to monitor predatory mites

1. Examine the underside of twenty 5-leaf terminals with fully expanded, shady leaves and count the number of adult predatory mites.
2. Calculate the number of predatory mites per leaf. A minimum of 0.5 predatory mites per leaf is needed to assist with the biological control of citrus thrips.

Sample date	Total fruits infested	Percentage of fruits infested[1]	Total predatory mites	Predatory mites per leaf[2]	Treatment decision or remarks

1. Percentage infested fruit =Total fruits infested if 100 fruits were sampled. Otherwise: Percentage infested fruits = (Total fruits infested ÷ Number of fruits sampled) × 100
2. Predatory mites per leaf = (Total predatory mites ÷ Number of leaves sampled).

Sample date	Total fruits infested	Percentage fruits infested[1]	Total predatory mites	Predatory mites per leaf[2]	Treatment decision or remarks

1. Percentage infested fruit =Total fruits infested if 100 fruits were sampled. Otherwise: Percentage infested fruits = (Total fruits infested ÷ Number of fruits sampled) × 100
2. Predatory mites per leaf = (Total predatory mites ÷ Number of leaves sampled).