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Citrus—Citrus Thrips Monitoring

Supplement to UC IPM Pest Management Guidelines: Citrus

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

Comments: _____

Monitor from petal fall until fruit is greater than 1.5 inches in diameter. For oranges, the monitoring time is about 6 to 8 weeks in spring. For lemons, 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 fruit from each corner of the block for citrus thrips (a total of 100 fruit).
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 the fruit under the calyx. Count fruit as infested only if it has one or more wingless first- or second-instar nymphs (ignore pupae and adults).
5. Record the total fruit infested with immature citrus thrips and calculate the percentage of infested fruit.
6. On very susceptible varieties, such as San Joaquin Valley navels, 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 get larger, treatment thresholds go up. Less susceptible varieties, such as Valencia oranges, 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 biological control of citrus thrips.

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

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