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Citrus—Citrus Red Mite Monitoring

Supplement to UC IPM Pest Management Guidelines: Citrus

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

Comments: _____

In February in the San Joaquin Valley, survey each orchard to determine if mites are present. Scan several leaves per tree at various sites, and use a hand lens to check a few leaves for eggs and immature stages. In southern California and coastal areas, depending on the local situation, consider monitoring beginning in late summer.

How to monitor in the San Joaquin Valley

1. In March, or as soon as mites are detectible, begin monitoring by collecting a total of 100 fully expanded leaves from throughout the orchard. Collect leaves from just inside the shady region of the tree. Determine the average number of adult female mites per leaf (total mites/100 leaves) and record the results. Repeat this sampling every 2 weeks until red mite numbers decline below 1 per leaf and petal fall has occurred.
2. On the same leaves, count the number of active stages of predatory mites and calculate the number of predatory mites per leaf (total mites/100 leaves).
3. Record the presence of virus-infected citrus red mites.
4. In San Joaquin Valley navel oranges, economic loss will not occur if citrus red mite (CRM) densities do not exceed 8 adult females per leaf by 2 to 4 weeks after petal fall.
5. Vigorous, well-irrigated trees can tolerate more mites. Low-to-moderate populations are considered to be beneficial as they provide food for natural enemies needed for other pests, such as citrus thrips.
6. High temperatures and virus reduce mite populations in June and July and no treatment is generally required during summer.
7. In orchards where nonselective pesticides have destroyed natural enemies, treatments may be required in spring to prevent excessive mite populations at petal fall.

How to monitor in southern California and coastal areas

1. Spring and summer populations of citrus red mite generally do not require regular monitoring or treatment.
2. Fall populations can be very damaging in conjunction with the Santa Ana winds if naturally occurring control is upset by nonselective pesticides or dust.
3. About every 2 weeks in late summer, monitor orchards as described above for the San Joaquin Valley.
4. If there are more than 8-10 citrus red mites (CRM) per leaf, consider applying a treatment before the occurrence of Santa Ana conditions.

Date	CRM females/leaf	Predatory mites/leaf	Virus mites presence/absence	Remarks