

Spider Mites



Willamette spider mite

- 1/50 inch long
- First pair of legs is translucent or pale yellow
- Minute food spots present at the side of the body



Pacific spider mite

- 1/50 inch long
- Vary in color from slightly amber to greenish or reddish
- Dark food spots present at the side of the body



Spider mite eggs

- Left: Willamette mite egg showing hair papilla (arrow)
- Right: Pacific mite egg



Willamette mite damage

- Mite colonies tend to reside along veins on underside of leaf
- Damage begins as yellow discoloration on upper leaf surface adjacent to veins
- Seek less exposed (shaded) leaves of canopy causing foliage to turn yellow or bronze
- Produce very little webbing



Pacific mite damage

- Mite colonies have clumped distribution and are found on the underside of leaves
- Damage begins as yellow spot on upper leaf surface
- Damage progresses, especially in hot weather, by turning leaves dry and brown
- Mites prefer exposed part of canopy, particularly top shoots and the sides of the vine facing afternoon sun

Photos: Jack Clark, University of California



Western predatory mite

- Body is tear-drop or pear shaped
- Color varies from translucent white to slightly reddish
- Mature predatory female mites are slightly larger than adult female spider mites
- Predatory mites constantly search for prey, move rapidly on the leaf and probe with the first pair of legs in rapid up and down waving motion
- They are often found resting in vein angles



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Spider Mites

| Date | Insect Stage | What to look for |
|-----------------------|--|--|
| April through harvest | <ul style="list-style-type: none"> • Willamette spider mites • Pacific spider mites • Western predatory mites | <ul style="list-style-type: none"> • Divide vineyard into more than one sampling area, as weak areas need more monitoring • Select 10 vines to sample • From each vine select a leaf with damage • Examine the lower surface of the leaf with a hand lens • Distinguish between Willamette and Pacific mite by the color of the adult front legs • Search carefully along veins and in leaf areas that are depressed or cupped • Record presence or absence of Willamette/Pacific spider mites and Western predatory mites. One or more mites constitutes “presence”. No mites constitute “absence” • Tally the number of leaves with one or more spider mites • Tally the number of leaves with one or more predaceous mites • Divide the number of leaves with spider mites by the total number of leaves sampled to obtain percent infestation • Divide the total number of leaves with spider mites by the total number of leaves with predatory mites to obtain the ratio of spider mites to predatory mites |