

Spider Mites



Willamette spider mite,
Eotetranychus willamettei

- $\frac{1}{50}$ inch long
- First pair of legs is translucent or pale yellow
- Minute food spots present at the side of the body



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 in white varieties or reddish in red varieties
- Produce very little webbing



Pacific spider mite, *Tetranychus pacificus*

- $\frac{1}{50}$ inch long
- Vary in color from slightly amber to greenish or reddish, first pair of legs reddish-tan
- Dark food spots present at the side of the body



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; leaves turn yellow or reddish and may bronze
- Mites prefer exposed part of canopy, particularly top shoots and the sides of the vine facing afternoon sun



Spider mite eggs

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



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 search with the first pair of legs in rapid up and down waving motion
- They are often found resting in vein angles

Spider Mites

Date	Insect Stage	What to look for
April through harvest	<ul style="list-style-type: none">• Willamette spider mites• Pacific spider mites• 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 basal leaf in spring, and a mid-shoot leaf in summer.• 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• Record presence (1) or absence (0) of Willamette/Pacific spider mites and predatory mites. Under the headings “spider mites” and “predatory mites”, record “0” or “1” for each leaf. One or more mites constitute “presence” (1). No mites constitute “absence” (0).• Tally the number of leaves with one or more spider mites• Tally the number of leaves with one or more predaceous mites• Divide the total 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