

Spider Mites

Although related to insects, mites are not insects but arachnids, similar to spiders and ticks. Mites are tiny and difficult to see. Look for webbing and check the undersides of leaves to be sure spider mites are present. Sprays of water, insecticidal oils, or soaps can be used for management. Spider mites have many natural enemies that often limit populations.

What to look for:

- ◆ To the naked eye, spider mites look like tiny, moving dots. Use a magnifying lens to see them.
- ◆ Adults are less than $\frac{1}{20}$ inch long and have eight legs, an oval body, and two colored eyespots near the end of the head.
- ◆ Spider mites live in colonies, mostly on the under surfaces of leaves; a single colony can contain hundreds of mites.
- ◆ When numbers are high, dense webbing can cover leaves, twigs, and fruit.

Mites cause damage by sucking cell contents from leaves.

- ◆ A small number of mites usually isn't cause for concern, but very high populations can be damaging, especially to annual plants.
- ◆ Often, damage first appears as a stippling of light dots on the leaves; sometimes leaves turn a bronze color. Heavily infested leaves may turn yellow and drop off.
- ◆ Damage usually is most severe in hot, dusty conditions and on water-stressed plants.

Protect spider mite natural enemies.

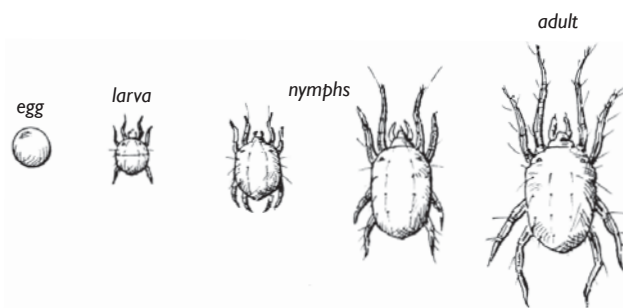
- ◆ Spider mites have many natural enemies, which prevent them from becoming pests in many landscapes, especially when undisturbed by pesticide sprays.
- ◆ Key predators include predatory mites, which are about the same size as plant-feeding mites, but have longer legs and are more active.
- ◆ Other common predators include thrips, lacewings, and lady beetles.
- ◆ Keep dust down. Plant ground covers, use mulches, and irrigate regularly.
- ◆ Avoid using insecticides that kill natural enemies.



How do I control spider mites?

- ◆ Water plants sufficiently to avoid drought stress, which increases mites and damage.
- ◆ Most woody plants can tolerate low to moderate mite populations, and natural enemies often are abundant.
- ◆ At least once a day, spray or thoroughly mist with water the underside of foliage in gardens and on shrubs and small trees.
- ◆ If you wish to use an insecticide, a good choice is an insecticidal oil or soap (or both combined) applied so you completely cover the undersides of leaves. Be sure mites are present before treating. Don't spray when plants are water stressed or if it is very hot.
- ◆ Spider mites frequently become a problem after the application of persistent insecticides such as carbaryl or pyrethroids—not only are these insecticides not very effective against mites, they often kill off their natural enemies and stimulate mite reproduction.

See *Pest Notes: Spider Mites* at www.ipm.ucdavis.edu for more details.



Life cycle of spider mites. Because adults are no bigger than the tip of a pencil, use a magnifying glass to see them.

Minimize the use of pesticides that pollute our waterways. Use nonchemical alternatives or less toxic pesticide products whenever possible. Read product labels carefully and follow instructions on proper use, storage, and disposal.

For more information about managing pests, contact your **University of California Cooperative Extension office** listed under the county government pages of your phone book or visit the UC IPM Web site at www.ipm.ucdavis.edu.



What you use in your landscape affects our rivers and oceans!