Spider Mites

Spider mites are common pests of fruit trees, vegetables, berries, vines, and ornamental plants. Mites are tiny and difficult to see. Although related to insects, mites are arachnids just like spiders and ticks. If leaves are stippled with white dots or have webbing, check the undersides to see if spider mites are present. Sprays of water, insecticidal oils, or soaps can be used for management. Spider mites have many naturally occurring predators that often limit their numbers.

To the naked eye, spider mites look like tiny, moving dots. Use a magnifying lens to see them. Adults are less than 1/20-inch-long and have eight legs, an oval body, and two colored eyespots near the end of the head.

When numbers are high, dense webbing can cover leaves, twigs, and fruit. A small number of mites isn't usually 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 can turn yellow and drop off. Damage is usually most severe in hot, dusty conditions and on water-stressed plants.

Spider mites have many predators or "natural enemies", which prevent them from becoming plant pests, 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 natural enemies include thrips, lacewings, and minute pirate bugs. Keep dust down. Plant ground covers, use mulches, and irrigate regularly. Avoid using insecticides that kill natural enemies. If plants are infested, apply a water spray or mist to the undersides of leaves at least once a day.

If you wish to use an insecticide, a good choice is an insecticidal oil or soap (or a combination of the two) 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 applying persistent insecticides such as carbaryl or pyrethroids. These insecticides are not very effective against mites and often kill off natural enemies and stimulate mite reproduction.

For more information, go to ipm.ucanr.edu