



## SPIDER MITES

### Host Plants and Description

Spider mites attack annuals, perennials, trees, shrubs, vegetables and houseplants. Spider mites are so called because they resemble extremely tiny spiders, so small they can barely be seen with the naked eye. They vary in color from red to yellow to green. Mites fit into two categories: warm season and cool season. Those that are most commonly seen in the garden and on houseplants are warm season mites, usually the red or two-spotted spider mites. Cool season mites attack primarily evergreen trees and shrubs.

Warm season mites are most active when the temperature range is between 75° and 95° F, and at these temperatures, they can reproduce twice as fast as they can at temperatures in the 55° to 75° F range. In a hot, dry summer, as many ten or more generations are produced. These mites feed on the sap in plant leaves, and they winter over in grass or weeds.

Cool season mites are active when the temperatures are cool, and they may even hatch on warm days in January or February. They are at their most bothersome during spring and fall when evening temperatures fall to less than 60° F, and they remain inactive during the hot summer months. These mites winter over on the woody parts of plants.

### Plant Symptoms/Damage

Warm season mites cause leaves to become dull and increasingly yellow, and finally drop. On closer inspection, a stippling, or very fine mottling can be seen on the upper leaf surface. Fine, silken webbing may also be seen on leaves, in leaf axils or on growing tips; this is where the mites lay their eggs. The best way to check for an infestation is to hold a sheet of white paper underneath the suspect leaf, then gently shake the plant to dislodge the tiny mites onto the paper where they can be seen. Plant-eating mites can be distinguished from predatory mites by squashing the mites to produce streaks. Green streaks indicate plant-eating mites; red or brown streaks are most likely predators.

Cool season mites produce a bronzed or brownish cast on leaves or needles. The eggs of spruce spider mites can frequently be found at the base of needles. Those of the Southern red mite, which attacks broadleaf evergreens, are laid mostly on the upper leaf surfaces and can be seen with a hand lens, along with webbing that may be on both upper and lower leaf surfaces.

Control cool season mites with dormant oil spray and fruit tree spray. However, do not spray blue-needled evergreens with oil as this can cause injury and needles may turn green.

## **Control**

Cultural controls for spider mites include keeping plants well watered and properly fertilized. Plants that are under stress are much more likely to become targets of a spider mite attack.

Wet weather sometimes acts as a natural control for spider mites, producing a fungus that is detrimental to them and dislodging them from trees. Try hosing infestations with a forceful spray of water for a similar effect.

Spider mites have many natural enemies, including ladybugs, lacewings, pirate bugs and predatory mites. Encourage these predators by choosing pesticides carefully, using those with the least residual effect.

Warm season mites can be controlled with insecticidal soap. Concentrate spray on the lower leaf surfaces, as this is where mites congregate. Applications may need to be repeated two to three times at weekly intervals.