

TWO-SPOTTED SPIDER MITES⁷

Damage symptoms

Spider mite damage is distinguished from thrips damage by the presence of fine webbing on leaf undersides and/or a silver sheen on damaged surfaces and by the absence of fecal deposits. Damage may appear as tiny yellow dots or stippling on the leaves. In severe infestations, leaves are covered with a fine webbing, turn yellow, and drop off. The pest overwinters in crevices in the greenhouse.

Plants attacked

Damage can seriously reduce crop quality on chrysanthemums, mini roses, and a wide range of ornamental plant types.

General Characteristics

On emerging from diapause in the spring, mites will immediately begin feeding on plants and lay up to 120 round, translucent eggs over a period of 3 weeks. These eggs hatch at summer greenhouse temperatures, producing six-legged immatures that develop into eight-legged adults. In late summer, two-spotted spider mites will turn red and go into diapause.

Mouthparts: Piercing/sucking

Where to find mites

Initial infestations may occur anywhere on the plant but are usually on undersides of leaves. Mites feed on the underside of leaves, sucking out the green cell contents, leaving a mottled appearance. As populations increase, the greatest damage is generally on the young canopy leaves because adults tend to move upward in the plant. The life cycle of mites is completed faster in the upper canopy where temperatures are usually higher.

Management

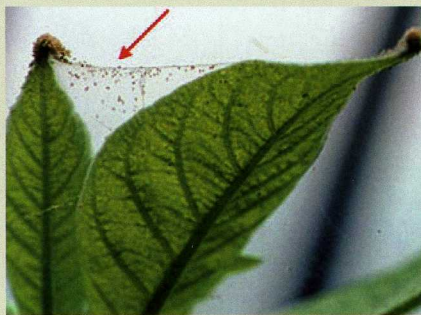
- ✓ Sanitation is particularly important to prevent mite infestations. Spraying a pesticide for mites in the winter will reduce the chance of infestation the following spring.
- ✓ The predatory mite, *Phytoseiulus persimilis*, is an effective biological control agent. To ensure success, it must be introduced when the pest population is low. Predators can be introduced on young plants.
- ✓ Outbreaks can be controlled with miticides, but treat when populations are low. All leaf surfaces must be covered for good control.

⁷*Tetranychus urticae* (two-spotted spider mite) [Arachnida: Acari:Tetranychidae].



Two-spotted spider mite adult.

Typical colony of mites. Spheres are eggs on the underside of a leaf.



Leaf damage: Stippling (left) and red arrow depicts webbing (right).



Top: Healthy leaves. Bottom: Leaves with mite damage. Note the yellowing and blotchy appearance.