



### TWO-SPOTTED SPIDER MITE



**Top Image:** The two-spotted spider mite egg. **Middle Image:** The two-spotted spider mite, *Tetranychus urticae*. **Bottom Image:** *Persimilis* going after a two-spotted spider mite.



The two-spotted spider mite, *Tetranychus urticae*, is considered one of the most economically important spider mite species. It has been reported on over 200 different species of plants.

#### IDENTIFICATION

Two-spotted spider mites are about .5 mm long. They have four pairs of legs and one body region, and no antenna, while insects have three pairs of legs and three body regions. Many mites can look similar at first but two-spotted spider mites have distinctive marks on their backs, two small spots. The spots can vary in color from red, to green, to purple depending on host plant. When scouting for two-spots keep in mind that right after they molt their spots are not present, but will eventually return.

#### DAMAGE

Two-spots are typically found on the undersides of leaves. They feed by inserting their modified mouthparts into plant cells. This damage causes yellow speckling, graying or bronzing of the leaves. Webbing can also be seen on plants with heavy infestations.

#### MANAGEMENT / CONTROLS

Biological control has proven to be a very effective tool against the two-spotted spider mite. Florikan offers several different biological control agents for their control.

One of the most popular is *Phytoseiulus persimilis*. The adults are orange in color and move rapidly, making them easy to distinguish from the pest mites. Once *persimilis* mites are released onto host plants they search the leaf surfaces feeding on all life stages of the two spotted mite, eating 5-20 prey (eggs or mites) per day. *Persimilis* can develop from egg to adult in 7 days and live for up to 1 month. It is important to note that relative humidity greater than 60% is required for survival of *persimilis*. These predators will also require a minimum temperature of 64°F.

Once the weather starts to heat up, *Amblyseius californicus*, a different predatory mite takes over. They work best in warm humid conditions, but will also tolerate low humidity (40% – 80% RH at 50° – 105°F). They are not quite as aggressive as *persimilis* but will also feed on alternate food sources. Adults are pear-shaped and white until they feed, then they take on the coloration of their prey.

The use of these 2 predatory mites with a selective spray program for other pests, has proven to be very success for the control of two spot spider mites. Many of today's pesticides are compatible with biological programs. Contact your local Florikan Sales Rep to learn more.

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