

Two-Spotted Spider Mites

Injury

Tiny mites suck plant juices from the leaves of many vegetable crops, causing a discoloration of leaves due to the loss of chlorophyll. Leaves of infested plants have distinct pale-yellowish blotches. As the mite population increases, the entire leaf turns brown, dries and drops from the plant. The under surfaces of infested leaves have silken threads spun across them, often forming large webs over the plant. Plants lose vigor, leaves drop off and the plants die eventually.

Description

Adult mites have eight legs, are very small (1/60 of an inch in length), are oval and range in color from the clear to light yellow to brownish-orange. Two dark spots can be seen on the back of the adult. The eggs are spherical, a shiny pale yellow, attached to the

underside of the leaves and can be seen with a hand lens. Newly hatched larvae are very small and can have only six legs. These develop into the nymph stages, which have eight legs and become adults shortly thereafter. The entire life cycle from egg hatch to adult depends on the temperature and can range from 40 days at 55 degrees F to 5 days at 75 degrees F.

Habits

Two-spotted mites overwinter as adults in soil, on tree bark, and in similar sheltered places. They become active in early spring but usually reach peak abundance in mid- to late July during hot, dry weather. Mites attack nearly all vegetable plants and are readily seen on beans, cucurbits, eggplant, tomato, and potato.

Nonchemical Control

1. Mow weeds around the

garden border to reduce the mite population.

2. Wash mites off plants with a soap and water solution applied under sufficient pressure to break the webs. Or, wash plants with water, using a garden hose.

Chemical Control

1. Excessive use of the insecticides carbaryl (Sevin) kill beneficial mite predators, allowing mite populations to increase rapidly. Insecticidal soap and either pyrethrin or kelthane may be used in your spray tank to reduce a mite population buildup.

2. Thorough coverage of leaves, especially the undersurfaces, is necessary to obtain good control.

3. Read and follow all label directions. Observe the proper days' wait before harvest for each particular crop.



Leaves of plants infested with two-spotted spider mites have distinct pale-yellowish blotches.



The under surfaces of infested leaves have silken threads. Pictured are adult mites on webs.

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Seeding New Cool Season Turfgrass

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The best time to seed a new cool season turfgrass lawn is late August through early September. Cool night temperatures favor rapid germination and establishment. The key to success, however, is often proper site preparation.

Before you disturb the soil, kill perennial and broadleaf weeds with a recommended non-selective herbicide such as glyphosate (Roundup or Kleenup). It is very effective against troublesome perennial weeds, but it will kill any green, growing plant, so users need to be careful to keep it from contacting landscape ornamentals, nearby turf areas and flower or vegetable gardens. The next step is to remove stumps, rocks, roots, buried wood or other debris.

If you need to make a grade change—to encourage water to run away from the house, for instance, or to eliminate a low, wet spot in the yard—first remove the topsoil



and stockpile it nearby. Fill the low spot and replace the topsoil. Avoid making grade changes around established trees. Even seemingly minor changes can damage roots and weaken or kill trees.

This is also the time to improve your topsoil. Improve sandy or clay soils by working several inches of compost or fibrous peat into them. Add one inch compost to each four to six inches of soil disturbed. Apply a starter fertilizer and work into the top 2 inches of the soil. Allow the topsoil to settle for a while.

To seed the area, divide the seed into two equal parts and apply half of it in one direction—say, east to west—and half at a right angle to that.

Rake lightly with the back of a leaf rake to mix the seed into the top 1/8 to 1/3 inch of soil—don't bury it. Then roll the seedbed to assure good contact between the seed and the soil.

Water as often as necessary to keep the area evenly moist until the grass emerges and starts to establish. Reduce irrigation intervals as the grass becomes established.

If your new lawn is to be sodded rather than seeded, site preparation is the same except that the site should be deeply watered (to a depth of 6 inches) a couple days before the sod is put down. Lay the sod within 24 hours of its harvest, if possible. Stagger the ends of the sod pieces like bricks and do not stretch the sod pieces—they will shrink as they dry and gaps will develop. Deep watering may be needed daily until the sod is well rooted.

Sod can be laid anytime the site can be prepared, but fall is an ideal time because the usually cool, moist weather is conducive to grass plant growth.

Slow-Release Fertilizers

Slow-release fertilizers are a boon to gardeners who do not want to keep tabs on fertilization schedules throughout the growing season. However, fertilizers that release nutrients slowly through a plastic resin coating can sometimes break down too fast when exposed to high soil temperatures, releasing too much fertilizer too fast and resulting in plant damage. Three-month formulas have a lighter coating than nine-month formulas and are more likely to suffer high temperature degradation. One maker of slow-release fertilizers says that the problem is solved by either burying the pellets or covering them with mulch.

—Don Janssen, UNL Extension Educator

Why Do Petunias Do That?

Petunias vary their growth habits according to temperature and day length. At temperatures of 62 degrees F and below, petunias will be branched, bushy, compact and multi-flowered. From 63 to 75 degrees F, day length affects growth habit. If plants receive less than 12 hours of sunlight at these temperatures, petunias will be single-stemmed and have only a single flower; with more sunlight, petunias branch and increase flowering. At over 75 degrees F, day length has no effect, and plants will always be tall, leggy and bear few flowers.

—Don Janssen, UNL Extension Educator

Converting Outdoor Flowers to House Plants for Winter



Many plants in the flower border will make excellent house plants this winter. Among the easy-to-maintain indoors are begonia, coleus, geranium and ivy. If they are already being grown in containers, it is a simple matter to bring them indoors. Start moving them in at night when the temperature drops below 60 degrees F to maintain their vigor and flower production. Locate plants where they receive sunlight equivalent to what they received outdoors for optimum bloom. If you are planning to take some garden plants indoors to provide for early fall bloom, use a sharp knife to root prune them now to a size a little smaller than the pot. Remove all buds and flowers and cut back the top growth severely. Water well until ready to lift.

—Don Janssen, UNL Extension Educator

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