

SPIDER MITES

Two-Spotted Spider Mite: *Tetranychus urticae*



Spider mites and eggs are very tiny.



Yellowish-green. Look for two dark spots.



Description and Damage

- Spider mites are very small. You must use a hand lens to see them.
- Yellow or greenish in color.
- One or more dark spots on each side of body.
- Leaves turn bronze, and have marks on them.
- Plants with mite damage don't grow very well, dry up, and look sick.



Smaller plant. Damaged by spider mite.



Area of field with damage from mites.



Plants with mite damage dry up around the edges.

Monitor



Look for mites on the lower sides of leaves with hand lens.



Early in the season check for mites on the older lower leaves near the plastic.

Once you see mites on lower leaves, look for mites on leaves in the middle of the plant.

Plants dying from mites. Too late to spray.



- Cause most damage in spring and summer
- Mites live on the bottom of leaves. Most live near the edges around the top of the leaf.
- Webs are visible when there are lots of mites.
- 2nd year plants have more mites than 1st year plants, and mite problems start earlier on 2nd year plants.
- On Chandlers, mites start eating the plants in the fall and survive the winter. They become a problem very quickly in late April or May. Monitor 2 times in the fall, and April through late May.
- On Albion and Seascape, mites become a problem in May and June. Monitor every week April through late May.

Before harvest, if you see more than 5 mites per leaf, you may need to spray.

Once harvest starts, if you see more than 10 mites per leaf, you may need to spray.

How to Control Mites

Non-Chemical Control

• Irrigate properly – not enough water makes mite problems worse



• Control dust along roads

- You can buy insects that eat spider mites. Contact Chuck Ingels or Debbie Thompson for advice.
- Predator mites will leave your field if there are not many spider mites for them to eat.
- Release predator mites early in the season and monitor fields daily to determine if it is working.



Predator mite eating a two-spotted spider mite.

Releasing predator bugs.



Phytoseiulus persimillus eats two-spotted mite.



Chemical Control

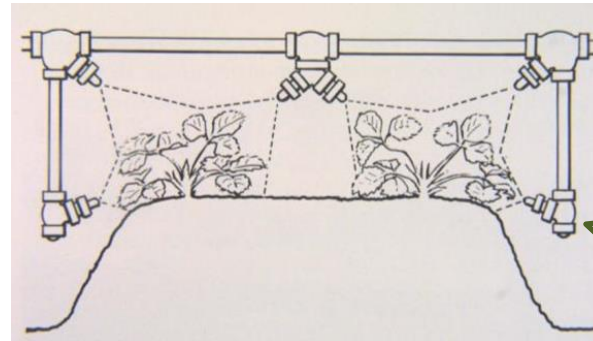
Don't use Sevin, Malathion, or Lannate. These pesticides are dangerous and kill predator mites and other good bugs that eat spider mites.

Spider mites can build resistance to chemicals. It is important to change chemicals.

Acramite- $\frac{3}{4}$ - 1 pound per acre in 100 gallons of water. 12 hour REI. 1 day PHI

Zeal- 2-3 oz per acre in 100 gallons of water. 12 hour REI. 1 day PHI

Organic JMS Stylet Oil- 3 quarts in 100 gallons water per acre. REI 4 hours. PHI 0 days. Do not spray if it is over 90° Fahrenheit.



Very Important to spray under side of leaves to control mites.