

## **RED SPIDER MITES (aka Two-Spotted Mites)**

There are many varieties of spider mites, but the main one in our neck of the woods is the **Two-Spotted Mite**. However, it often goes by the name of **Red Spider Mite** because it is red much of the time. Over their life span, these guys actually range in color from red to green and are the size of the period at the end of this sentence. They thrive when it is hot, dry and dusty. When conditions are ideal, they may produce a new generation every five to six days.

Mites feed on several vegetables, ornamental flowers, trees and houseplants. They are predictable pests of tomatoes. They feed on the underside of leaves where they suck out sap, producing yellow dots that somewhat look like the plant has been sandblasted, eventually causing the leaf to turn totally yellow, curl up and die.

Webs are often produced in the feeding area, especially when the population has exploded out of control. If you are still not sure, hold a white sheet of paper under the involved leaves, tap it sharply, and see if tiny moving specks drop off onto the sheet.

Unfortunately, the diagnosis is the easy part. Control is very difficult. Spiders are arachnids, more closely related to ticks than insects. So, standard chemical insecticides are not as effective for control of mites as they are for insects. Specific chemicals for mites, called mitocides, are available in commercial agriculture, but not for the homeowner.

Mites do not like to be wet, as moisture seems to slow reproduction. A sharp stream of water to leaves, especially the backside of leaves, will remove a large number of mites and make the plant less pest friendly. Horticultural oils and soaps are also effective for mild infestations. Both will need to be applied every few days and it is important to apply to the backside of the leaves where the mites feed. These products only work if they come in contact with the mite. Always follow the labeled directions, especially noting on which plants they may be used - not all plants are tolerant.

If you cannot control the mites with water, soap and oil, the OSU Extension Center suggests a trial of an organic insecticide, pyrethrin, if you accept that it could harm some beneficial insects. It is available in several brands, but make sure the product is labeled for mites and for use on vegetables.

The problem with using most insecticides for spider mites is that they may actually increase the production of mites. This is especially true with Sevin (carbaryl), which can cause a dramatic increase in mite numbers. This is partially due to killing off the good insects and a poorly defined chemical effect of increasing mite fertility. The beneficial predators include several insects and cannibalistic mites that feed heavily on spider mites.

So, the best strategy for homeowners is to monitor plants closely and to use what tools are available as early as possible. These tools may offer some control but are not likely to completely eliminate mites. It is possible that these measures may be unsuccessful. If spider mites cannot be controlled, it is best to pull up the entire plant and all its parts and send it to the landfill. You can then start over, looking towards a fall vegetable crop.