



The Mighty Little Spider Mite

by Rosie Bonar, UC Master Gardener

If you have spider mites in your garden, you probably won't see them. They are no larger than the period at the end of this sentence and they look like moving dots on the undersides of leaves. You will only know they are there from the evidence they leave and the damage they do.

The mite is not a true insect, but is an arachnid and closely related to spiders. They have eight legs and two body parts **with no antennae or wings.** Mites damage plants by sucking cell contents from the leaves, which gives them a stippled and bleached appearance. **A few mites on a plant do very little harm, but a large population causes real plant damage.**



Look for a colony of spider mites on the underside of plant leaves.



Spider mites suck the plant juices from leaves causing a stippled appearance.

Leafhoppers, lacebugs and thrips cause similar damage, so you need to be sure of the cause of damage before doing anything. These other critters don't leave webbing and are often visible on the plant. **To confirm spider mite activity you may need a magnifying glass or a 10X hand lens to really focus in on them.**

On roses, mites cause the leaves to be stippled or bleached looking, which means they have yellow blotches instead of being shiny and green. The leaves will look dry and burned and even fall off. When the weather warms up in the spring and summer, spider mites reproduce rapidly. They prefer hot dusty weather and will appear after a hot dusty storm or after a series of hot dusty days. They also appear first along the edges of gardens bordering on dusty roads or on the margins of gardens. If the plants are under stress from water shortage, they are very susceptible to a mite infestation.

Roses aren't the only plant that mites can attack. Mites feed on many fruit trees, vines, berries, vegetables and ornamentals. And just like on the roses, you will notice the damage before you notice the mites.

There are many ways to treat your plants for mites. First, a strong spray of water aimed at leaf undersides may be enough to disrupt the mites. Spider mites have many naturally occurring

predators that attack mites and keep their numbers under control. These insect enemies are often too small to see as well. Some of them are predaceous mites; that's right they are mites that eat other mites! Other predators include minute pirate bugs, big-eyed bugs, and lacewing larvae. If you can tolerate the damage, the mite populations will experience a rapid decline at the end of summer when natural predators overtake them, the weather turns cooler and hopefully, we have some rain to wash them away.

Another way to treat your plants for spider mites is with insecticidal soaps or oils. Be sure to spray the underside of the leaves where most of the mites hang out and be sure to read the label. More than one application may be necessary. Be careful to avoid applying insecticidal soaps and neem oil on days that are hot. High temperatures and high humidity may increase plant sensitivity and lead to stress in the plant.

Unfortunately, broad spectrum pesticides will kill all insects, even the beneficial ones that help control the pest populations. Often it is the use of broad spectrum pesticides that lead to a mite infestation to begin with, because their enemies are gone and they flourish in the absence of predators.

For more information about spider mites, visit www.ipm.ucdavis.edu.

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