

The Art of Bonsai

By Eugene Howell

This is the second part of our discussion of the pests that can infest your bonsai. In Part-One we briefly covered aphids. In particular we learned how to determine whether your tree has them, and what to do about it. In this part we will discuss how to identify mealy bugs, scale, spider mites and thrip, and how to get rid of them.

Mealy bugs are easy to identify but not as easy to eliminate as are aphids (discussed last month).

Like aphids, mealy bugs mainly stay on the undersides of leaves, along the stems, and on the branches and trunk. They can be identified by their protective coating which usually is white and looks like cotton.

The two methods of dealing with them are by suffocation and insecticides.

Mealy bugs cover themselves with a waxy substance that sheds water, so one strategy to eliminate them is to put oil into the water so that it coats the waxy coating (the recipe was in the last newsletter). This stops the ability of the bug to breathe. The second strategy is to use an insecticide that says it will handle mealy bugs. Spray the tree thoroughly, paying particular attention to the undersides of leaves and twigs and branches. Do this again in 7 to 10 days and about monthly thereafter.

Scales are eliminated in the same way as mealy bugs.

It is not difficult to fail to recognize a scale when looking at one on a stem or branch. It is a lot easier when they are on the underside of a leaf. Scales are usually round or oval (when viewed from above) and look like a small bump on the branch or twig. They generally have a brownish coloration, so it is not difficult to mistake them for part of the branch. On the underside of a leaf their color and shape make them fairly visible. A typical scale will be about the size of the head of a pin. They also cover themselves with a waxy shell so use an oil (as discussed above) or insecticide that says it will handle them. If you are not sure that you are looking at a scale, scrape it with your thumb nail and it will easily be removed from the leaf or branch.

Of these five pests, spider mites are usually the most tenacious. The casual gardener has difficulty identifying that this pest is present and more difficulty deciding what it is. Once identified, they can be difficult to eradicate.

Spider mites are extremely small insects which closely resemble ticks. Because of this, many gardeners never realize that the plant is even under attack. They can usually not be seen with the naked eye until the infestation becomes so large that what the gardener is actually seeing is a large group of them. What frequently gives away their presence is the extremely fine webs that will eventually appear between leaves or between leaves and stems. At this point the infestation is so bad that there can be thousands of mites on the plant and getting rid of all of them takes persistence and the right insecticides. If the gardener happens to carry a 15 or 20 power magnifier the mites can be observed moving across the leaf or stem.

There is one easy and fast method of checking for their presence. Hold a white piece of paper under a branch and shake the branch vigorously. If tiny specks of dust fall onto the paper, watch them. If you see the specks begin to move, you have spider mites.

An insecticide is the most effective treatment for mites. There are several good insecticides on the market, but you need to make sure the label specifically says that it will take care of mites (or spider mites). If it doesn't, you are probably wasting your time and money. Mites will seldom be eliminated by one spraying. It is recommended that the bonsai owner spray twice at a 7 day interval and then every three weeks for two more intervals. Thereafter spray monthly to keep new infestations under control.

Thrips are interesting little critters. One of them is about the size and shape of a letter "I" on this page (except a little thicker in the middle). The way to identify that a tree has them (and they love certain types of Ficus) is to look at the leaves. If you see some that are rolled into a cigar shape along the long axis of the leaf, you likely have thrips. Open the rolled leaf and look for tiny little black "I"s crawling around.

The best way to handle thrips is through the application of a systemic insecticide. The reason that a systemic is needed is that these clever critters build a water-shedding tent over themselves. The rolled up leaf provides them excellent protection from sprays. A systemic insecticide is taken up by the roots of the plant and distributed throughout by the circulatory system. It takes a little longer to take effect, but it does an excellent job. A second method, if you have the patience and the plant has enough leaves, is to pluck the curled leaves and burn them. This will eliminate the mature thrips, but will not eliminate eggs elsewhere on the plant. When these hatch and the thrips mature (doesn't take very long), they roll up more leaves and you face the task of having to pluck them. If this cycle lasts long enough you may wind up with a naked plant.

Always keep alert for pests on your trees. Don't let the dropping of dead leaves give you the first hint that one of your trees has them.