



Tree Pests: Oak Leaf Roller and Pecan Webworm

In the spring of 2004, the Oak Leaf Roller reached epidemic proportions. People in the Hill Country were inundated with little green to cream-colored caterpillars hanging from web-like threads from their live oaks and other trees. They seemed to number in the millions. The very hungry caterpillars stripped the trees bare, and proceeded to consume surrounding flora as well. In addition, our trees often have problems with the fall (pecan) webworm in pecan and other trees. How do we protect our trees most effectively without poisoning our whole yard? The following information should be helpful.

1. Keeping the trees as healthy as possible will reduce stress and therefore minimize the negative impact of any pest infestation. **Proper tree maintenance** practices are as follows:

A. Hire a reputable arborist on a regular basis to properly prune trees. In addition, a good arborist can spot potential problems *before* they get out of hand.

B. Avoid overwatering. An established tree (in the ground at least 2 years) should only be watered deeply once a month, only when rain is lacking. Established trees should be watered slowly out near the dripline, not at the trunk.

C. Be sure trees are not buried too deeply. Pull away mulch, soil, and debris from around the trunk until the first root is exposed. This is called the root flare, or the trunk flare, and should always remain exposed to receive good air circulation.

D. Ideally, a thick mulch (at least 3") should be spread throughout the root zone of the tree. **Sylvan Formula** is the perfect mulch, containing mulch along with compost, minerals, corn meal, molasses, and compost tea. In areas where there is lawn, ½" of **Revitalizer Compost** can be used instead.

2. Maintaining your property organically and minimizing pesticides will help to keep pest insects in check. An organic yard is more likely to have **naturally-occurring predators** of the caterpillar, such as birds, lizards, and native wasps. Avoid killing wasp nests that are not in the way, since wasps consume mass quantities of caterpillars.

3. The **Trichogramma wasp** is an effective biological control measure for the oak leaf roller, the pecan webworm, and many other caterpillar pests. The Tricho wasp lays its eggs in the eggs of the pest, before it hatches into a caterpillar. Ideally, Tricho wasps should be released at the first sign of the pest moth. For the oak leaf roller, the proper time is in late April or May for next spring's caterpillars. For the pecan webworm, there are three times a year when moths are laying eggs: early May, mid-June, and early August. Ideally for both pests, release wasps two or three times, ten days apart, starting in early May. The following resources for Trichogramma wasps, and other beneficial insects, are recommended:

A-1 Unique Insect Control – Citrus Heights, California – www.a-1unique.com – (916) 961-7945

ARBICO Organics – Tucson, Arizona – www.arbico-organics.com – (800) 827-2847

4. A biological control called **Bacillus thuringiensis (B.t.)** is a very specific insecticide for caterpillars. Spray B.t. on the leaves of the oak tree in early March as the oak leaf roller first starts eating, the caterpillars eat a sprayed leaf, get sick, and die. For the pecan webworm, the web must be opened to spray the leaves inside the web. Ideally, the B.t. should be sprayed in the evening since it breaks down in sunlight.

5. Another control for both of these pests is to spray trees in the winter with dormant oil. As the name suggests, the oil should only be sprayed in the winter. Coat the upper twigs, branches, and trunk.

Here's to happy trees!

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