

# Pecan Leaf Scorch Mite

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## Distribution:

The pecan leaf scorch mite is found in pecan-producing states from South Carolina and Florida in the east to Texas in the west. It is particularly a problem in Georgia, Alabama, and Louisiana.

## Damage:

Mite infestations usually begin in the lower portions of the tree and spread upwards. Initially, the infested leaflets will become discolored along the midrib. Damage can appear on mature leaves in June, but most damage occurs in July, August, and September. Scorch mite damage appears as dark brown blotches on the leaflet. Considerable foliage loss can occur when heavy infestations go uncontrolled.

## Description and Life Cycle:

Although they are not insects, mites are closely related to them. Mites are members of the class Arachnida, which also includes scorpions, spiders, ticks and harvestmen.

The pecan leaf scorch mite is tiny and barely visible to the naked eye (Fig. 1). The pale-green mite is generally found feeding on the undersides of leaves (Fig. 2), though it can be found on the upper leaf surface as well.

It overwinters in bark crevices on the tree limbs, especially around leaf scars. The mites emerge in the spring and begin attacking the trees as soon as the new growth begins.

These mites are prolific, having multiple generations each year. Females begin laying small, pearly, round eggs (Fig. 2) after maturing. The number of eggs laid ranges from 9 to 36 per female. The life cycle from egg to adult varies from 11 to 15 days, but under favorable conditions, can be as short as five to seven days.



Figure 1. Adult pecan leaf scorch mite.



Figure 2. Pecan leaf scorch mite and eggs.

### **Control:**

The pecan leaf scorch mite normally is not present in sufficient numbers during late spring and early summer to warrant control. Its seasonal abundance can vary from orchard to orchard, and mite populations in various orchards can react differently to the same insecticides or acaricides.

When leaf discoloration begins to appear (Fig. 3), use a 10X or higher hand lens or magnifying glass to inspect the undersides of the leaves for mites. Sample ten compound leaves on each of five to ten trees throughout the orchard. Treat when an average number of eight or more mites per compound leaf are present. The best control is achieved when treatment applications are made during low population levels. This is particularly true for some acaricides that have little or no effect on the eggs.



Figure 3. Pecan leaf scorch mite damage

For a listing of acaricides that can be used for controlling pecan leaf scorch mites, refer to the Louisiana Recommendations for Control of Pecan Insects. This can be found at [www.lsuagcenter.com](http://www.lsuagcenter.com). When using insecticides, be sure to check the pH of the water being used for spraying. The pH needs to be between 5.5 and 6.5 for optimum insecticide efficacy. Use of a buffering agent will help maintain the desired pH once pesticides have been added to a solution.