

Leaf Scorch Occurrence in Pecan

Pecan foliage can exhibit various scorching symptoms that may occur from a variety of sources, including mite damage, black aphid damage, bacterial leaf scorch, sun scald, and N:K imbalance. Currently, there appears to be a widespread scorching problem in pecans throughout the state which does not fit the typical description of the problems listed above.

As mentioned, this problem is widespread and has been observed from the Albany area up into Ft. Valley and over into East Georgia. At this point, it is unclear what the exact cause of the scorching is; however, *Glomorella*, the causal agent of anthracnose and a variety of secondary pathogens have been isolated from affected leaves. The symptoms we have observed are consistent with the anthracnose lesions that we sometimes see on foliage late in the season. However, this year, the symptoms are occurring much earlier than usual.

Typically, this type of problem is brought on by tree stress resulting from one or multiple factors. Although we have not yet conclusively identified the stresses leading to the current problem, anthracnose is favored by excessive rainfall and temperatures in the range of 68 degrees F. This pathogen has a long latent period, with symptoms only becoming apparent much later. Since symptoms were reported in early to mid July, the long latent period associated with *Glomorella* suggests that the infection period could have been during April or May.

Again, we are still uncertain of the factors leading to our current leaf scorch problem; however, the following observations have been made: 1) Weather conditions in early April and mid to late May of 2009 were much cooler and wetter than normal; 2) While the problem can be found on many cultivars and in many orchards, the symptoms appear to be worst on 'Desirable' in crowded orchard situations with a relatively heavy crop, particularly in areas that may have had waterlogged soils during this year's spring rains.

Regardless of the cause, there is no action that can be taken to prevent this problem once the symptoms are apparent. Growers should attempt to reduce stress on the trees as much as possible. The current leaf scorch problem has been reported from well managed orchards, but frequent rains may have interfered with fungicide applications. The spray histories of orchards with and without leaf scorch are being reviewed to assess whether or not an interruption in fungicide applications played a role.

Glomorella can also infect fruit, with symptoms becoming apparent late in the season. As mentioned earlier, infection occurs much earlier in the season than when symptoms appear. Maintaining a tight fungicide schedule during nut development can be important for reducing the incidence of fruit infection. Weather conditions during June

and July differed from that of April and May. Rains were less frequent and temperatures were much higher. This is fortunate as both of these conditions are less favorable for *Glomirella*.

Leaf scorch on pecan leaves



