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Georgia Pecan Nut News

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Trailer Decontamination

Lenny Wells

Peanut cross contamination within the pecan industry has become a serious concern. One potential source of cross-contamination is the use of trailers previously used in peanut harvest for transport of pecans during pecan harvest. Peanut allergies result from allergenic proteins within the peanut kernel. If pecan growers use trailers which had previously held peanuts for pecan harvest, the potential would exist for the pecans to become contaminated with peanut allergens. This could occur through contact with peanut oil residue left on the surface of the trailer or through peanuts remaining in the trailer from peanut harvest.

If contaminated pecans were to be processed in a shelling plant, the entire shelling plant itself could become contaminated. Ultimately, a peanut allergin-related death traced back to the consumption of peanut-contaminated pecans could be

devastating to the pecan industry. As a precaution against such an incident, the following steps are recommended for thorough clean-out of trailers:

1. Clean and sweep trailer thoroughly, assuring that all previous products are removed from the trailer.
 2. Wash trailer with soap and water solution, making sure all surfaces are scrubbed well with a brush. Use any FDA approved food grade detergents.
 3. Rinse trailer out thoroughly with water, making sure there are no visual signs of cleaning solution left inside.
 4. Sanitize inside of trailer with at least 50 ppm chlorine water solution. This can be accomplished by using 1 pint of household bleach (5% Chlorine) per 100 gallons of water.
 5. Allow trailer to air dry.
 6. Visually inspect trailer before pecans are introduced.
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Delayed Damage from Storms

Lenny Wells

We heard from Dr. Bruce Wood a year or so ago, that we would probably be seeing the effects of the 2004 hurricanes in subsequent years. That statement appears to be holding true. I've had calls about and have now seen numerous trees throughout the state suffering from die-back (see photo below). These are usually trees in the 15-25 year old range, many of which had been blown over in previous storms, and were straightened.



Although long term survival of storm damaged trees is often unpredictable, it has been suggested that trees leaning at angles greater than 45 degrees rarely reach their full production potential. Much of the root damage on such trees occurs on the side opposite the lean, and will be subject to pest infestation.

The roots of leaning trees may or may not be pulled out of the ground, but often have sustained some injury. Most of the trees that I have observed dying back have had obvious walled out areas around the base of the trunk (see photo below). Even those



that didn't, had noticeable settling around the base of the tree.

Since root damage has likely occurred in such cases, the canopy should be pruned back to balance the tree canopy with the functioning root system, just as when trees are moved from one orchard to another. The severity of the pruning will depend on tree size. For instance, trees 4" in diameter, will need very little, if any, pruning. Trees 12" in diameter or larger should be topped at 16 feet and side limbs cut to 4 feet.

This is best done immediately after trees are straightened. Trees now exhibiting die-back should benefit from pruning as well. This is the case when any type of root damage occurs, including that from *Prionus* root borer infestation. An application of Temik at 0.5 lb/tree applied in the wetted area of the root zone may also help to stimulate root growth and may protect against pest infestation.

More on Boron Tank Mixes

Lenny Wells

I've received numerous calls on the source of Boron in the tank mix and their effect on pH. There are numerous Boron products available, most of which will raise pH. I've seen some data from UGA row-crop agronomist Glenn Harris, who has tested many Boron products. His data suggests that only the dry Boric acid products do not raise tank mix pH, and will actually lower it somewhat. Even liquid boric acid products tend to raise pH, primarily because of the solvent used in the product. When pH of the tank mix is above 7.0, a buffering solution should be added when using Imidacloprid (Provado/Tri-Maxx), Kelthane, Imidan, or Dimethoate. Many insecticides are most stable around a pH of 6.0. Also, when using Boron in a tank-mix with any products that come in a water soluble pack, be sure to add the water soluble pack to the tank first and allow it to dissolve before adding Boron.

Insects & Nut Drop

Will Hudson

This is the time of year when pecan trees drop a large portion of the nuts set at pollination. This drop is the tree's way of adjusting the crop and does not represent lost production. That doesn't mean all the nuts on the ground were lost dropped voluntarily, however, and pest activity can lead to additional crop reduction that growers can and should prevent. The trick is telling "normal" drop from pest-related drop.

The most important insect cause of nut drop now is hickory shuckworm. The second generation of this pest emerges during June and early July, and the moths lay eggs on the shuck of developing nuts. Feeding by the caterpillar causes these immature nuts to fall from the tree. Growers should look closely at nuts on the orchard floor. Those attacked by

shuckworm will have a small wound on the shuck, usually near the middle of the nut, with a powdery white residue around it. If you see many nuts with this symptom, a treatment will probably be warranted. The same insecticides used for casebearer will control shuckworm very effectively.



Shuckworm Damage

If the fallen nuts have a wound with a shiny, liquid "tobacco juice" stain around it, the culprit is nut curculio. This weevil is widely distributed in Georgia but infestations are spotty around the pecan-growing region. By the time the symptoms of nut curculio are obvious, it often is too late to control the pest. Treatments are the same as for pecan weevil-Sevin or a pyrethroid-and can lead to more problems with aphids and mites than the curculio itself would have caused. Unless there is a history of increasing problems in an orchard, treatment is usually not recommended.



Nut Curculio Damage

A Note on Scab

Jason Brock

As of June 7, the incidence of scab is low. What rain we have had has been spaced out, eliminating long periods conducive for disease development. One might think that with low amounts of leaf scab that inoculum levels would be low as we head into the period of nut growth and expansion. Unfortunately, that is not the case. Past experience has shown that the most important factor that determines the potential for nut scab is rainfall between sprays during nut development. Even in 2003, possibly the worst year for scab, the spring was relatively dry. The disease cycle is not fully understood, but the scab pathogen must have a means of reserving inoculum over an extended period of time.



The message for this year is to be aware that scab can still be a problem. Maintain an appropriate fungicide program and be prepared to tighten the spray schedule if summer rains become common. However, if the dry weather remains, keep the schedule stretched out and take advantage of the weather by eliminating the cost of at least one spray.

DATES TO REMEMBER

Pecan Fruit Thinning Demonstrations

To Be Announced (Sometime in July,
depending on crop development)

GPGA Fall Field Day

USDA Fruit & Nut Lab

Byron, GA

September 7, 2006



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