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Management of Poultry Litter

Lenny Wells

Many growers have switched to the use of poultry litter over synthetic fertilizers due to the cost of N. Poultry litter can be a valuable source of fertilizer, but it must be properly managed. The fertilizer value of poultry litter varies and is based on a number of factors including pH, temperature, sand content, and available moisture.

Nutrients from poultry litter are released slowly and as a rule, generally only about 60% of the N/ton or 36 lbs of N/ton will be available to the tree during the season. Due to the variability of N availability, leaf sampling is strongly recommended.

Poultry litter in pecan orchards should be managed to provide spring P and K and a portion of the total N required by the crop. The remainder of the N should be applied after crop load is assessed mid-summer. For

example, apply 1 ton of composted poultry litter per acre in February and early May. In an “on” year, apply an additional 50-80 lbs N/A as synthetic fertilizer in late August or split between early August and early September. Add K based on the leaf N:K ratio. If N/K is at or above 2.5, additional K will be needed. In the “off” year, the poultry litter applications should be sufficient. This approach should help to avoid any unnecessary P buildup and should not lead to contamination issues since the litter is applied only in the spring.

Weed Control Around New Transplants

Lenny Wells

Aside from adequate soil moisture, the best thing growers can do for young pecan transplants is to maintain effective weed control. Weeds rob young trees of nutrients and water and have been shown to reduce growth of young trees by as much as 50%. Yields may also be reduced by as much as 75% during the first 4 years of harvest when weeds are not managed early in the life of the tree.

The options for weed control are very limited on newly transplanted trees. Surflan, Prowl, and Solicam can be used after the soil is settled around the tree and no visible soil

cracks are observed. Since it sometimes takes a few months for the soil to adequately settle, and these are pre-emergence materials, they often aren't practical on 1st year transplants. Select, Poast, and Fusilade are effective for control of grasses.

Weed control on young transplants is much more practical when growers place a grow tube over the new trees or paint the bark with white latex paint. The bottom 3.5 feet of trunk should be protected by one of these two methods. When this practice is employed, paraquat or glyphosate directed at the ground can be used for effective control of most weeds. Be sure to avoid getting any spray drift on foliage or green bark.

Research has shown that optimal tree growth is attained when a 7 ft X 7 ft area is kept weed free around the tree during the first year. A 10 X 10 ft area is required in subsequent years.

Effect of Boron on mix pH *Lenny Wells*

Concern was expressed in some of the recent county production meetings about the effect of Boron on mix pH, and subsequent effects on the efficacy of pesticides in the mix. The addition of most Boron products may produce alkaline spray tank solutions and may require acidifying adjuvants if used in pH-sensitive tank mixes.

I am only aware of one case in which pecan materials were specifically examined for this problem. In this case, the addition of 1/32 to 1/4 lb actual B per 100 gal water did not elevate spray solution pH to the alkaline level, except for Provado, where Solubor elevated pH to about 8.5 (this is likely high enough to cause hydrolysis of the active ingredient of Provado). Fortunately, Provado is likely to be used primarily in late summer or autumn whereas the primary benefit of B would be from spring applications.

Chemicals tested were Fulfill, Intrepid, Confirm, Lorsban, Elast, Stratego, Provado, & SuperTin.

Tank mixes with or without Boron may require acidification when prepared with alkaline well water. Because boron product and water chemistries vary, the best practice is to ***measure and adjust the pH of the tank mix*** before adding pH-sensitive pesticides.

Most insecticides should maintain efficacy when the spray solution pH is at 6.0-6.8. Miticides such as dicofol are particularly sensitive to alkaline tank mixes.

Phylloxera

Will Hudson

Orchards with a recent history of Phylloxera infestation, should spray for these insects in their first pre-pollination spray at budbreak. A second application may be required as well, depending upon the severity of the situation. Provado at 3.5-7 oz., Lorsban at 2 pts., and Centric at 2.0-2.5 oz. will all provide sufficient control.

DATES TO REMEMBER

Georgia Pecan Growers' Annual Conference
Perry, GA
May 4, 2006

Edited by

Lenny Wells

Extension Horticulturist-Pecans

Contributors:

UGA PECAN TEAM

Jason Brock, Ext. Pathologist-Pecans

Will Hudson, Ext. Entomologist-Pecans

Paul Sumner, Ext. Ag. Engineer-Pecans

Lenny Wells, Ext. Horticulturist-Pecans

