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Georgia Pecan Nut News

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2008 Crop Potential

Lenny Wells

After an expected record or near record crop in 2007, most would expect a very bad "off" year in 2008. This does not appear to be the case for the Georgia crop. A variety of factors likely contributed to the crop potential that is out there, including low disease and insect pressure, increased sunlight, and fruit thinning in 2007. All of these factors likely contributed to relatively low tree stress last year where trees had access to adequate soil moisture.

Whatever the cause, many orchards show good crop potential right now. The female bloom has been excellent on 'Desirable'. Even 'Stuarts' appear to have a crop. I have seen many old 'Stuart' trees with about 40-50% of a crop, mostly in the top of the tree. Young 'Stuarts' also look good, with most I have seen bearing about a

60-70% crop of female flowers. Some varieties, such as 'Schley' seem to be hit and miss. Some trees have a good crop, while others appear completely blank. The 'Sumner', 'Pawnee', and 'Cape Fear' bloom that I have seen also look good, while most of the 'Elliott' look poor.

We still have a long way to go to harvest and many things can happen, but we are off to a good start. As it looks right now, I would say this year's "off" crop looks as good as some of our recent "on" year crops (with the exception of last year). Although the female bloom is good, some of those flowers appear weak and may drop. The size of our June drop should tell a lot about what we can hope to harvest this year.

With the cost of fuel, it will be important to make a count of bearing terminals in your orchard this year. This should let you know if you have enough of a crop to warrant the expense of a full spray program.

New Herbicide Label

Lenny Wells

Prowl H₂O, which has been labeled for non-bearing trees for some time, now has a label for bearing pecan trees. Prowl is an excellent pre-emergence herbicide with good activity on grasses and broadleaf weeds. The

labeled rate is 2-4 qts per acre. For full effectiveness, adequate rainfall or rain should be received within 7 days of application. Prowl can be applied to newly transplanted trees after soil has settled around the roots. Prowl should not be applied within 60 days of harvest. At 2 qts per acre, the cost of Prowl should be about \$13 per acre; however, when tank-mixed with glyphosate or Gramoxone, it should prolong the interval between herbicide strip applications, saving fuel costs.

Early to Mid-Summer Insect Management

Will Hudson

Casebearer sprays will probably have gone out by the time you read this, but trap catches have been spotty across the state. Very little is being caught in Brooks County, while many orchards in the Albany and Tifton area area on up to Ft. Valley and into east Georgia report high trap catches. IGR's such as Intrepid or Dimilin should be applied before damage is observed. Lorsban can be used upon observance of 1st damage. But, as those signs of damaged nuts increase, spraying will not give control, no matter what is used.

Pecan trees harbor yellow aphids throughout the crop season. With the current cost of fuel, you should be very selective about when to make applications for these pests. This will require effective scouting in your orchard. You should rely on beneficials to control your yellow aphid populations early in the season. After July 1, treat if numbers exceed 20 per compound leaf. As you scout, remember that aphids will be present throughout the season and the trees can tolerate low population levels of yellow aphids.

Black aphids can be a serious problem but they too can be present throughout the season and growers should be

wary of jumping out and spraying too soon for these pests. Presence of black aphid adults early in the season is nothing to get too alarmed about; however, when you begin to see nymphs alongside the adults, populations are building and you should get ready to spray. Treat when 15% of terminals show these kinds of populations following July 1. In the absence of making applications of pyrethroids early in the season, black aphids should not be a problem until later in the year.

New Pecan Variety—'Byrd'

Lenny Wells

Many of you may have heard a lot of talk about the release of a new pecan cultivar called 'Byrd', which was developed from a 'Desirable' X 'Pawnee' cross by Dr. Darryl Sparks at UGA. The following information on 'Byrd' has been made available by Dr. Sparks:

"The original Byrd seedling was from a cross made in 1989. The seedling first fruited in 1997. In 2001, the seedling was selected for trial and, in 2002, an experimental planting was established to evaluate alternate bearing tendency and nut quality attributes

Budbreak in Byrd is about 3 days before Stuart. The tree is a vigorous grower, more so than Desirable. The vigorous growth increases the potential fruiting surface early in the life of the tree. Tree form is moderately upright as in Pawnee and not spreading as in Desirable. Date of nut maturity is similar to Pawnee or 18 to 21 days before Stuart.

Byrd produced 2.5 lbs. of nuts/tree compared with six nuts per tree for Desirable the 4th year from planting. During the 5th year, production per tree was 8 pounds versus about 1 pound for Desirable. Nut size was 46/lb. for Byrd and 46/lb. for Desirable. Under limited soil moisture, nut size for both

cultivars are correspondingly less. Percentage kernel was 62.1% for Byrd and 52.1% for Desirable, again with excellent soil moisture. Byrd's shell is thinner and kernel percentage is higher than Pawnee. Observations confirm that Byrd is more susceptible to water split than Pawnee but, so far, fruit split has been minor. Nevertheless, fruit split is a potential problem.

The nut shells exceptionally well. The kernel is plump with deep but wide dorsal (back side) grooves, glossy, and attractive. Color is similar to Desirable. In striking contrast to Pawnee, speckling of the kernel has not been a problem with Byrd. The nut, its cracking ability, and its kernel quality were evaluated by a nut broker, a buyer, and four processors. All rated the nut and kernel very high and without apparent deficiencies.

Precocity of Byrd is very high and much greater than Desirable as indicated earlier. Precocity and prolificacy are highly correlated; thus, if a cultivar is precocious as a young tree, it will be prolific as mature tree. Because of Byrd's precocity, large nut, and large cluster (2.9 for Byrd and 1.7 for Desirable) it would be expected to bear alternately with increasing tree maturity as occurs with most cultivars. The original Byrd tree began to bear alternately in the 8th year of fruiting although a commercial crop was produced during that year and subsequent "off" years.

To date, kernel percentage of Byrd has not differed statistically during the "on" vs. "off" fruiting cycle although it was numerically lower during the "on" years (62.7%) than the "off" years (63.4%). However, as the tree matures and the proportion of wood to leaves increases, lower quality during the "on" year and alternate bearing may be accentuated.

Thus, as with almost all pecan cultivars, Byrd should not be planted unless fruit load is controlled by mechanical fruit thinning.

The ability to mechanically fruit thin Byrd was evaluated and fruit were thinned with ease in contrast to Kiowa which is difficult to thin.

Byrd is a protandrous cultivar, meaning it sheds its pollen before pistil receptivity. At Athens, GA, Elliott, Schley, and Stuart are effective pollinizers for Byrd. Byrd, in turn, is an effective pollinizer for Elliott and Schley but not for Stuart. Pawnee and Desirable are not effective pollinizers for Byrd.

Although not immune, Byrd has a high resistance to scab. In an unsprayed trial, Byrd fruit had a scab rating of 1.6 whereas the rating for Desirable was 5.0 (1 = no scab, 5 = nut is not salable). These data are especially significant in that they are from the 2005 season which was unusually wet, thus, conditions were ideal for scab development. Bear in mind that there is no assurance that Byrd will remain highly resistance to scab in the future.

The leaf has good resistance to black pecan aphid and is better than Desirable. Because the fruit of Byrd mature early, application of insecticides for hickory shuckworm control will have to be applied earlier than for conventional cultivars such as Stuart.

Byrd is recommended for trial only.

Availability

Byrd trees are propagated and marketed by Patten Seed Company, P. O. Box 217, Lakeland, GA 31635-2382. The company holds an exclusive licensing agreement with the University of Georgia. Consequently, graft and bud wood are not available for distribution. A U.S. Plant Patent is pending.

Trees will not be available in 2009 and availability will be limited in 2010. Afterwards, availability should increase significantly."

More information on 'Byrd' can be found on Dr. Sparks' website:

<http://www.geocities.com/CollegePark/Campus/3370/ByrdPecan51208.html>

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DATES TO REMEMBER

Georgia Pecan Growers' Fall Field Day
Tifton , GA
September 11, 2008

COUNTY PECAN PRODUCTION MEETINGS

June 10, 2008 Lee Co, Update

Contact your local county extension office
for information on location and time of
meetings.



