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### **2009 Crop Update**

*Lenny Wells*

Although the 2009 pecan crop looked to be in the range of 100-110 million lbs earlier in the season, it is not likely that Georgia's pecan crop will meet that mark. Heavy scab pressure has been the major factor in reducing this year's crop, particularly for susceptible cultivars like 'Desirable' and 'Pawnee' in the Albany and deep south Georgia area. In addition to causing nut loss, scab will also take a toll on nut quality this year. As a result, top quality nuts should bring a premium price, especially early in the harvest season.

While the 2009 crop is still a good one, it will not come in as big as the early season estimates predicted. The current realistic estimate is more in the range of 90 million lbs for Georgia.

Most of the other pecan producing states have a pretty good crop as well. Texas is estimated to have around 60 million lbs, New Mexico 70-75 million, and Oklahoma 26 million. Total U.S. estimate is anywhere from 300-328 million. Mexico also has a strong crop with estimates ranging from 93-100 million lbs. The carry-in crop, currently estimated at 70-90 million lbs is significantly lower than at this time last year.

Exports to China are expected to enhance the demand for Mammoth, Jr. Mammoth and Jumbo Pecan Halves as well as Extra Large and Large Pecan Pieces.

### ***Pecan Diseases in 2009: More than Scab***

*Jason Brock*

With the return of frequent rainfall in 2009, the return of scab was expected. While that did come to pass, Georgia pecan growers have had to deal with other diseases in addition to scab. Leaf anthracnose (leaf scorch) has been the most widespread and unexpected disease, but downy spot has also been observed in some locations.

Incidence of leaf scab was generally low across Georgia, even though April and May had extended periods of rainfall. In fact, many growers had a difficult time getting

their sprayers into orchards. Although this did not lead to leaf scab, it could be a factor in the occurrence of other diseases. The incidence and severity of nut scab varies from orchard to orchard, but is typical of a relatively wet year. Most of the Desirable crop will have reduced size and quality due to scab.

As mentioned earlier, leaf anthracnose and downy spot have both been found. Anthracnose was first reported in early July and downy spot is just showing up in late August. What these diseases have in common is a long latent period that puts the infection period back in April or May. It was at that time when free moisture was plentiful and fungicide spray programs were interrupted by rain events. By the time these diseases are observed, the opportunity for management has passed. The risk of each is early defoliation and some orchards have already suffered from defoliation caused by leaf anthracnose.

Anthracnose is also a disease of fruit, but it's unknown if that will be a problem as we approach harvest. Like with the leaf phase of this disease, infection would occur earlier in the year. Weather conditions of June and July differed from that of April and May. Rains were not as frequent and growers were able to maintain a fungicide program so hopefully anthracnose will not be a widespread problem on fruit as harvest approaches.



Anthracnose on pecan foliage



Downy Spot of Pecan

## **Drying Early Harvest Pecans**

*Paul Sumner*

Pecans that are shaken mechanically from the trees generally have higher moisture content than those that drop naturally because they do not have time to dry in the air before they are shaken down. It is necessary to dry the shaken nuts quickly to reduce the kernel moisture to 8 percent and maintain the quality of the nut. Pecans can dry naturally on the floor of the orchard if ground conditions are dry and fair weather is expected in the following 3 to 4 days. With a mechanical dryer, you can dry harvested pecans regardless of weather conditions.

Drying time normally is defined by the amount of moisture to be removed and amount of airflow through the pecans. A factor to be considered in drying time is the amount of foreign material in the load of pecans. Normally, if drying is to be conducted it occurs immediately after harvest before the process of cleaning. Clean pecans will dry much faster than a load that has not been clean of leaves, sticks and hulls.

**Temperature.** The optimum dryer temperature is 95 degrees Fahrenheit. Air temperatures should not exceed 100 degrees Fahrenheit. Temperatures above this tend to create off-flavors, darkening of the nutmeat, and a general loss of quality. Lower temperatures can dry pecans effectively although more slowly.

**Humidity.** Dryer humidity varies with weather conditions and the temperature of the forced air, but the relative humidity of the dryer air should remain below 60 percent. Lower relative humidity will

decrease drying time. When drying with unheated air, the fan should be turned off when the humidity is above 60 percent.

**Air Flow.** The recommended air flow is approximately 90 cubic feet per minute (cfm) of air per square foot of drying floor operating against a static pressure head of 1 inch of water. With 8- x 14-foot trailers, the drying area per trailer is 112 square feet. Hence, the total air flow that the fans in this system should be able to deliver is 10,080 cfm.

**Drying Conditions.** Table 1, compares drying rates that were determined experimentally for different air temperatures, humidity, and air flow rates. These figures suggest the relative importance of temperature, humidity, and air flow upon drying time.

Table 1. Effect of drying conditions on drying times for in-shell pecans.

Temperature (degrees F.)	Relative Humidity (percent )	Air Movement (cfm)	Drying Time
102	9	420	9 hours
78	39	300	17 hours
70	50	slight	2-3 weeks
66	40	640	15 hours
66	40	0	2-3 weeks

## ***Plan Now for Planting Trees***

*Lenny Wells*

With harvest approaching, planting trees is not the first thing on the minds of most growers, but in order to make the right decisions and obtain the cultivars you want from the nursery, it is good to plan ahead.

I get many calls in December, January, and February about what cultivars to plant and where to buy them. In most cases, by that time, it is too late to get the cultivars and size trees the grower desires and they have to settle for small trees or trees of another cultivar if they are determined to plant that year. It may already be a little late to line up trees for planting in the winter if you want large numbers of trees in the 6-7' range.

A pecan nursery list is available on the UGA pecan website (<http://www.tifton.uga.edu/ugapecan/PECAN%20NURSERY%20LIST.pdf>)

Choose cultivars carefully as this, along with selection of the orchard site, is one of the most important decisions you will make in the life of the orchard. Current recommended cultivars for commercial production in Georgia are Caddo, Cape Fear, Desirable, Elliot, Forkert, Kanza, Oconee, Pawnee, and Sumner. There are many other varieties that are recommended under certain conditions or for trial. These include Candy, Creek, Excel, Gloria Grande, Kiowa, Moreland, and Stuart.

Information on all of these cultivars and more is available from UGA Cooperative Extension Bulletin 898 "Pecan Varieties for Georgia Orchards", which can be found at <http://pubs.caes.uga.edu/caespubs/pubcd/C898/C898.htm>

For more detailed information on these and many other pecan cultivars, see the UGA Pecan Breeding webpage at <http://sacs.cpes.peachnet.edu/pecan/>

## ***Conservation Stewardship Program***

*Lenny Wells*

Sign-up for the Conservation Stewardship Program began August 10, 2009. Although this is a continuous sign-up, the **cutoff date for 2009 is Sept. 30**. CSP encourages land stewards to improve their conservation performance by installing and adopting additional activities, and improving, maintaining, and managing existing activities on agricultural land and nonindustrial private forest land. The NRCS will make CSP available nationwide on a continuous application basis. In short, this program pays you for conservation activities you may already be doing as well as those you are willing to adopt.

The board of the GA Pecan Growers Assoc. recently met with officials from the state NRCS. They assured us that pecan growers are indeed eligible for this program. We identified 31 potential activities that pecan growers already perform or could perform that would make them eligible for approval in the CSP program. These include but are not limited to the planting of clover, scouting for pests, irrigation monitoring, etc. A complete list of eligible activities can be found at the NRCS CSP website: [http://www.nrcs.usda.gov/new\\_csp/csp.html](http://www.nrcs.usda.gov/new_csp/csp.html)

Estimated payment ranges for cropland are from \$12-\$22 per acre. The program potentially pays up to a maximum of \$40,000/year with a maximum of \$200,000 over the 5 year period of the contract.

Producers interested in CSP are encouraged to begin the application process by completing a producer self-screening checklist. This checklist and other documents regarding the CSP program are available at the website listed above. It is recommended that you complete the checklist before going down to your local NRCS office.

If you have problems with sign up at the NRCS office or run into road blocks, contact the Georgia Pecan Growers Association for assistance.

### **Cultivar Profile---'Lakota'**

Lenny Wells

(Info from USDA Pecan Breeding Program, College Station, TX)

'Lakota' originated from a controlled cross ('Mahan' X 'Major') made in Brownwood, Texas, in 1964. It was tested as 64-6-502 and released cooperatively by USDA-ARS and the Kansas Agricultural Experiment Station, Kansas State University in 2007. There are 59 nuts/lb, with 62% kernel. Kernels are cream to golden in color, with medium, non-trapping dorsal grooves and rounded dorsal ridge. Nuts shell out easily into full halves and are very attractive. Time of spring budbreak is similar to 'Kanza' and 'Pawnee'. 'Lakota' is protogynous, with early to mid-season receptivity and mid to late season pollen shed (similar to Kanza). 'Lakota' should be a good pollenizer for, and be well pollenized by 'Pawnee'. Time of nut maturity is early, about two weeks after 'Pawnee'. 'Lakota' has performed well in tests in the northern pecan production areas of Kansas, Missouri, Illinois, Oklahoma and Texas.

**Although this cultivar is expected to be**

**suitable for the southeast, testing under southeastern growing conditions has only recently started with trees going in at Tifton and in Alabama.**

Trees are vigorous, upright in growth habit and develop strong limb angles and a wind-resistant tree structure. 'Lakota' is very resistant to scab disease, with medium susceptibility to yellow and black aphids.



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