Bertie County Ag News

NORTH CAROLINA COOPERATIVE EXTENSION

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Billy Barrow, County Extension Director

Contact Us at 252-794-5317

Determining Peanut Maturity

We are quickly approaching harvest and determining peanut maturity can be illusive. Seasoned growers look at several factors to determine when to dig. Methods commonly used include days after planting, the number of growing degrees accumulated, hull scrape or pod blasting and actual shell out. Growing degree days or heat units accumulated and days after planting assume there has not been extended moisture or temperature stress during the growing season. Research shows that Va. type peanuts need between 2520 and 2770 growing degree days to mature with adequate moisture. Below is a chart showing the estimated date that approximately 2700 GDDs could be reached at various planting dates based on temperatures recorded this year at the PBRS in Lewiston and past averages of heat accumulation in September. Use this information as a guide to start determining maturity. Later planted peanuts and those under longer periods of stress will need longer to mature.

Estimated Date to 2700 Growing Degree Days (GDD)

Planting Date	GDD as of 8.22	Sept 1	Sept 5	Sept 10	Sept 15	Sept 20	Sept 25	Sept 30	Oct 5
April 25	2530	2719	2825	2930	3035	3108	3180	3253	3325
May 1	2463	2652	2758	2863	2968	3041	3113	3186	3258
May 5	2367	2556	2662	2767	2872	2945	3017	3090	3162
May 10	2305	2494	2600	2705	2810	2883	2955	3028	3100
May 15	2250	2439	2545	2650	2755	2828	2900	2973	3045
May 20	2147	2336	2442	2547	2652	2725	2797	2870	2942
May 25	2050	2239	2345	2450	2555	2628	2700	2773	2845
June 1	1919	2108	2214	2319	2424	2497	2569	2642	2714

GDD Growing Degree Days with a base of 56 degrees F

Generally, when night temperatures fall into the mid to upper 40's for two consecutive nights, peanuts stop the maturation process. Even though day temperatures may increase significantly, seldom due plants recover from the cooler night temperatures.

Peanut Maturity Clinics Schedule

We will be "blasting" peanut samples to aid growers in determining maturity on the following dates at designated locations.

Date	Location		Time
Sept 4	**Powell and Stokes**	**Windsor**	**8:00 a.m.**
Sept 11	**Colerain Peanut and Supply**	**Colerain**	**8:30 a.m.**
Sept 16	**Powell and Stokes**	**Windsor**	**8:00 a.m.**
Sept 16	**Coastal AgroBusiness**	**Rosemead**	**1:00 p.m.**
Sept 20	**Colerain Peanut and Supply**	**Colerain**	**8:30 a.m.**

Collect representative samples from 3 typical areas in the field. Generally, a one-foot sample from each spot will give ample peanuts to test (about 150 pods). If the samples are pulled the night before, keep them wet to avoid the hulls drying out. Be sure to pull all the peanuts from the vine to get the best results. Only pulling the biggest or most mature can skew the results.

What Does Speed Cost?

Harvest is always a time when every minute counts, but is there a cost involved? Over a 6 year period at Lewiston with the Bailey variety, Dr. David Jordan saw an increase of 1275 lbs/ac when digging was delayed from Sept 7 to Oct 5. This equates to an **$11 per acre per day** increase based on a $500 contract rate. Factors such as vine condition and predicted weather certainly enter into this decision.

Digger speed is critical to a good harvest. In a study last year at Lewiston, researchers found that for every 1 mph increase in ground speed above 2mph, there was an average loss of 225 pounds per acre. With a $500 contract price that amounts to **$56.25 per acre per mph over 2.**

Digging and harvest capacity are important factors for growers to consider. Generally, everyone can dig quicker than they can harvest. This may relate to ground speed as well as hours of the day the operation can be performed. Optimum quality is generally attained after the peanuts are dug and field dried for 3-5 days or when moisture is between 20-25 percent. Extended field drying (on the ground 7-10+ days) can lead to lower yields and grades from shedding, excessive splits and LSK's as well as cause sheller problems with darkened hulls and cracked and broken shells. Try to schedule digging and combine operations to maximize profits and minimize field losses.

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NC STATE UNIVERSITY

Billy Barrow
County Extension Director

N.C. Cooperative Extension
P.O. Box 280, 104 Dundee St.
Windsor, NC 27983

Email – billy_barrow@ncsu.edu
Office - (252) 794-5317
Fax – (252) 794-5375
Visit us: web @ https://bertie.ces.ncsu.edu

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William Barrow, Jr.