The peanut crop received adequate moisture and heat unit accumulation through the latter part of August and into early September for pod development in most of the Virginia-Carolina region. Data for these measurements across the region through August are presented in the table. Virginia market type varieties require approximately 2600 heat units or growing degree days ($DD_{56\ F}$) to reach optimum maturity. However, excessive heat and drought as well as prolonged periods of wet soils and cloudy days can slow the maturation process. Injury from pests, especially thrips, and the negative impact of some pesticide sprays can slow this process. Based on recent years, the estimate for maximum daily heat unit accumulation across the Virginia-Carolina region is approximately 25 growing degree days or about 175 growing degree days per week. Based on peanut emergence of May 15 (heat unit accumulation begins at peanut emergence rather than planting date,) the earliest digging date would likely be September 10 in the upper Virginia-Carolina region and September 6 in the lower Virginia-Carolina region. For peanut emerging June 1 and June 15, the earliest possible digging dates for Virginia market types would likely be 12 to 21 days and 25 to 32 days, respectively. Most peanuts will be dug at some point after 2600 heat units for reasons expressed above. Runner market type varieties typically mature at a slower pace and can remain in the field longer even when approaching optimum maturity with less pod shed compared with Virginia market types. Limited digging has occurred in South Carolina and there are currently no reports of digging in North Carolina and Virginia have been noted.

In the next few weeks growers will be focusing on final leaf spot sprays and preparations for digging peanuts and inverting vines. Cooler temperatures over the Labor Day weekend in the upper Virginia-Carolina region could result in outbreaks of Sclerotinia Blight in fields with adequate soil moisture and history of this disease. Overall, fields through much of the region are weed-free and leaf spot and stem rot diseases have been controlled adequately going into the harvest season. However, a significant amount of plantings in the region were in the month of June, with some of those plantings towards the middle and latte half of the month (approximately 15%, depending on location.) These peanuts will need protection from leaf spot disease through the month of September and possibly into early October if temperatures and moisture reflect the past two growing seasons in the Virginia-Carolina region. These peanuts likely will not reach optimum pod maturity until the middle and latter half of October and possibly into November. Considerably fewer heat units will accumulate per day in October, especially the latter half of that month compared with September. It is generally observed in the middle and upper sections of the V-C region that a three-week difference in planting in May and June can result in only a one-week difference in peanuts reaching optimum maturity in September and October. Compared with 2019, the peanut crop in the Virginia-Carolina region in 2020 appears to be at least a week later reaching optimum maturity at comparable planting dates.

Rainfall has been abundant in general across the region through the end of August. In the mid and upper Virginia-Carolina region rainfall was excessive in August. The

exception has been the lower Virginia-Carolina region and some pockets across the middle and upper parts of the region. If dry weather develops and persists in September and October, late-planted peanuts likely will not develop as rapidly as needed and yield could be compromised in general. Peanuts planted in May will need rain for efficient digging and to minimize pod shed in soils that become hard. This could be of particular consequence in reduced tillage systems.

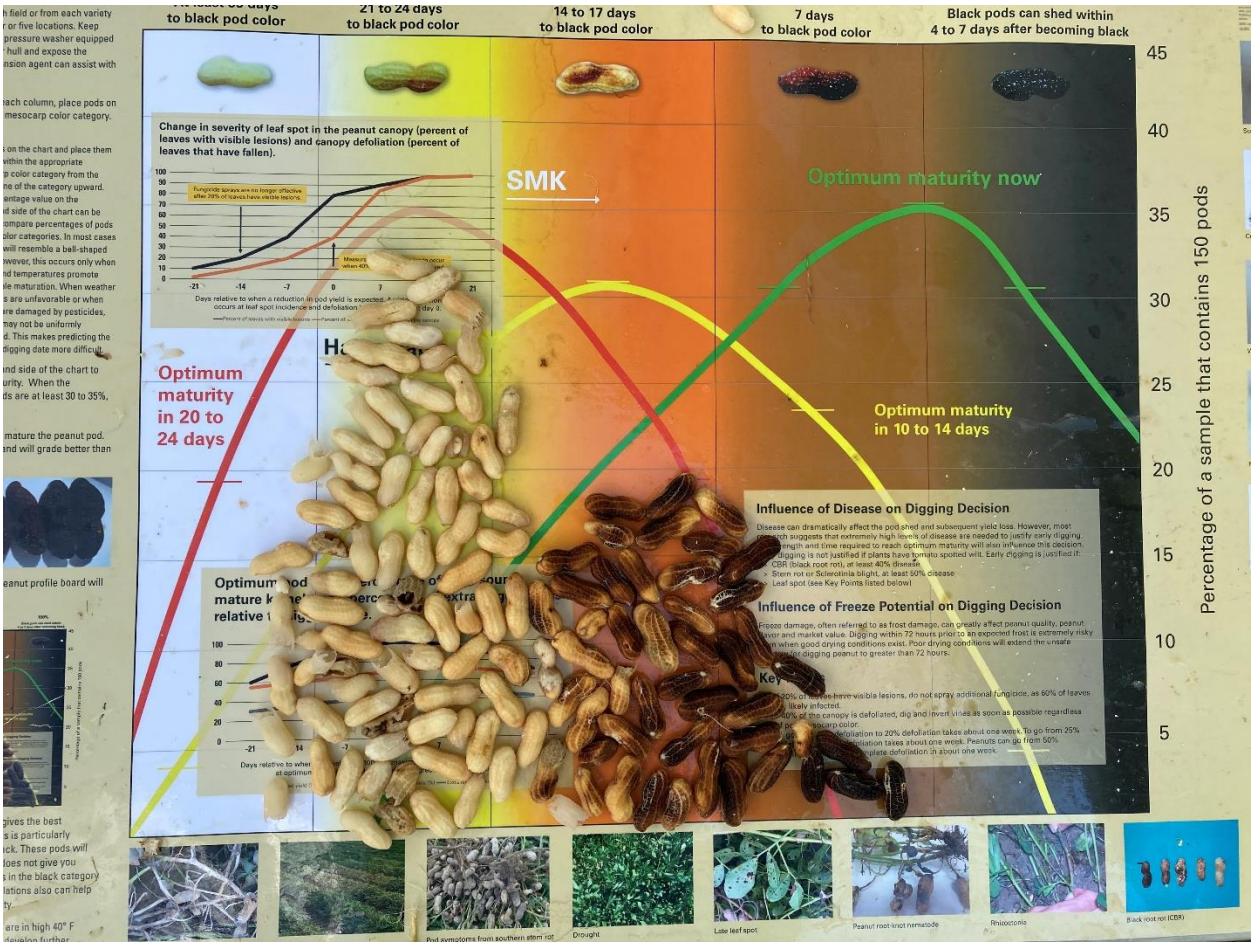
Yield potential in the region remains at 3,900 pounds/acre farmer stock (4,370 kg/ha.)

Leaf spot disease in an area of a field not treated with fungicide near Whiteville, North Carolina on September 1. Very few fields across the V-C region are expressing this degree of leaf spot disease. Note in the second image that lesions for this disease often begin and can be more prevalent in the lower portion of the peanut canopy.

Disease caused by a soil-borne pathogen near Whiteville, North Carolina on September 1. Although symptoms of disease can be apparent on vines, the magnitude of impact of the diseases southern stem rot and *Rhizoctonia* will often be difficult to assess until peanuts are dug and vines inverted. Note larvae of either corn earworm or tobacco budworm (injury to plant is not associated with this insect.)

Peanut pod maturity on September 1 for peanut planted May 10 and June 10 near Whiteville, North Carolina.

May 10



June 10

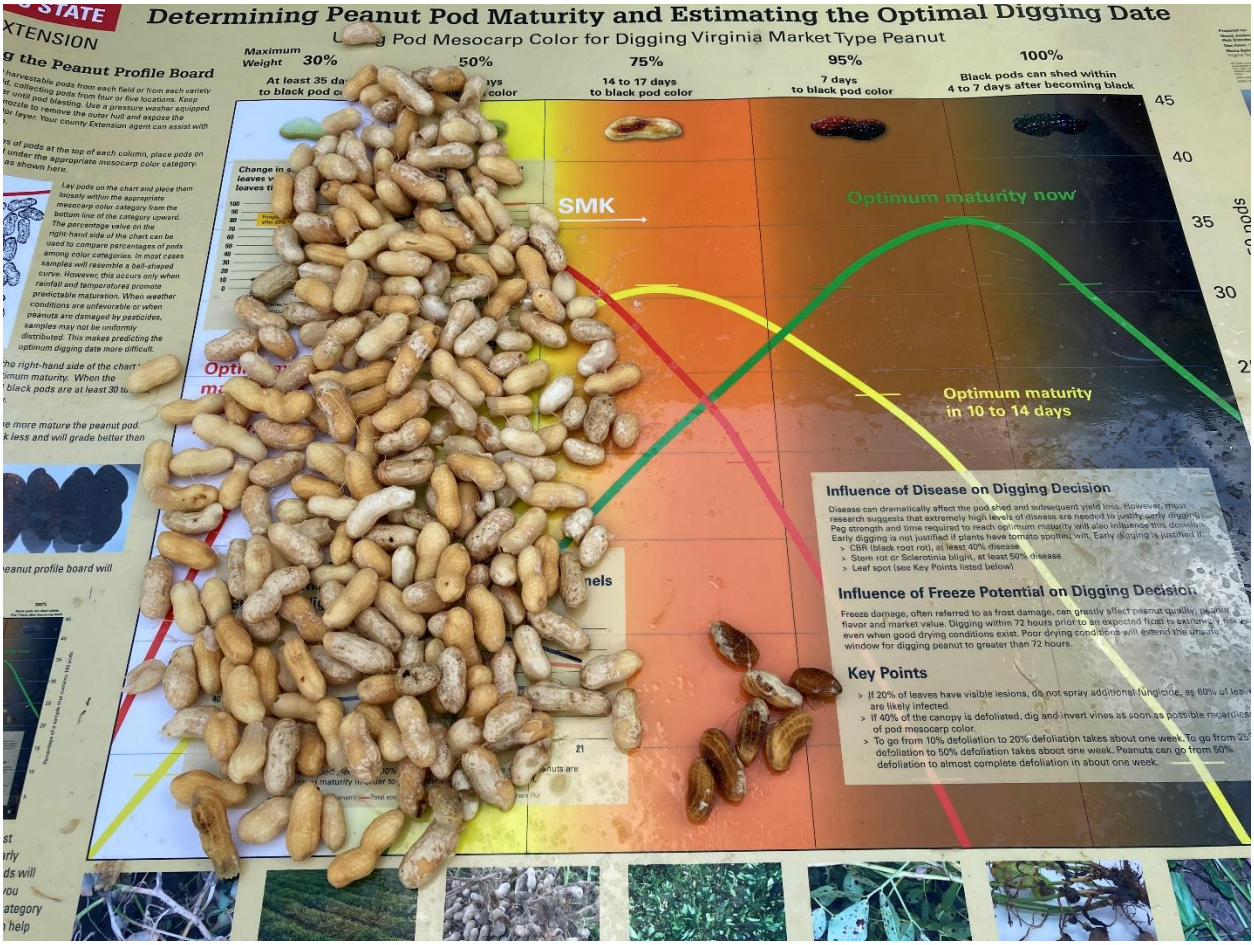
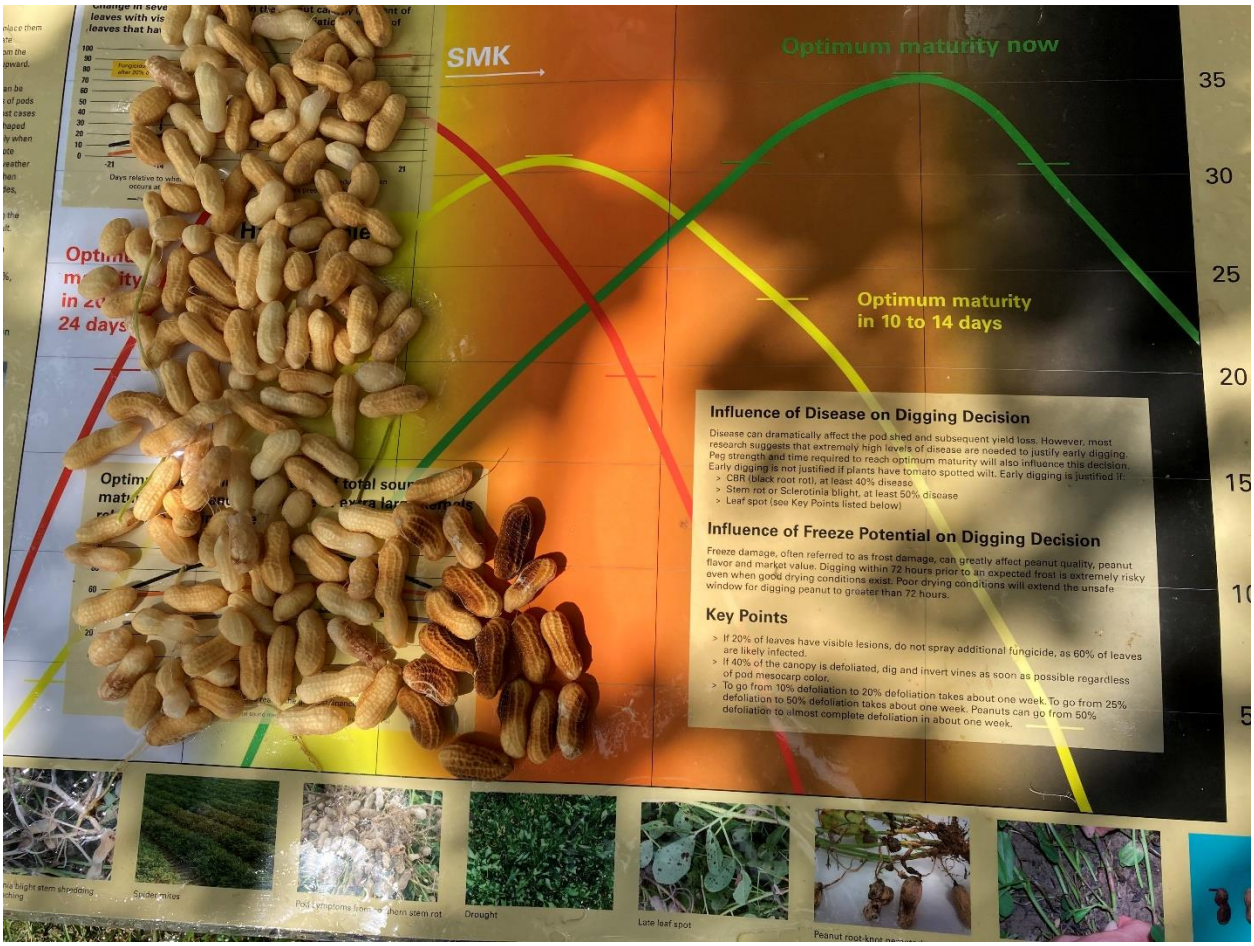

Determining Peanut Pod Maturity and Estimating the Optimal Digging Date
Pod Mesocarp Color for Digging Virginia Market Type Peanut
Maximum Weight
30%
50%
75%
14 to 17 days to black pod color
95%
7 days to black pod color
100%
Black pods can shed within 4 to 7 days after becoming black
SMK
Optimum maturity now
Optimum maturity in 10 to 14 days
Influence of Disease on Digging Decision
Influence of Freeze Potential on Digging Decision
Key Points

Image of pod mesocarp color recorded on September 5 for peanut planted near Edenton, North Carolina in late May and early June. Edenton is located in the northeastern section of North Carolina approximately 40 miles from the Virginia state line.

Mid-May planting



Early June planting

Symptoms of tomato spotted wilt in the peanut canopy near Whiteville, North Carolina in September 1.

Heat unit accumulation for various intervals reflecting emergence dates and rainfall for May, June, July, and August in the Virginia-Carolina Region. Source: NC Climate Office (https://climate.ncsu.edu/cronos.)

Dates	Wakefield, VA	Lewiston, NC	Rocky Mt, NC	Clinton, NC	Whiteville, NC	Florence, SC	Orangeburg, SC
Heat Units ($DD_{56\ F}$)							
May 1-August 31	2445	2367	2409	2527	2551	2761	2515
May 15-August 31	2356	2307	2367	2450	2468	2640	2573
June 1-August 31	2136	2077	2107	2182	2180	2313	2247
June 15-August 31	1864	1810	1833	1895	1891	1988	1941
Estimated Days to 2600 heat units (based on 25 $DD_{56\ F}$ per day in September)							
Emerge May 15	10	12	9	6	4	0	1
Emerge June 1	19	21	20	17	17	12	14
Emerge June 15	29	32	31	28	28	25	26
Rainfall (inches)							
May	2.5	2.7	4.7	12.2	10.0	10.7	3.7
June	5.4	4.3	8.7	4.7	9.1	5.8	3.7
July	4.8	3.0	3.4	5.0	3.8	5.7	3.2
August	8.5	10.2	11.9	8.2	7.1	5.4	4.2
Total (May-July)	12.7	10.0	16.8	21.9	22.0	22.2	10.6
Total (May-August)	21.2	20.2	28.7	30.1	30.0	27.6	14.9