Peanuts across the Virginia-Carolina region continue to progress but rainfall since August 20 has been sporadic and limited. Demand for water in peanut is high during pod fill, and across the region for this period of time between 0.34 and 1.91 inches of rain have been received. Peanut typically need approximately one inch of rain per week to continue developing. Cooler temperatures across the region from September 3 until September 6 were helpful in reducing stress on peanuts, but higher temperatures during the week of September 6 increased stress in absence of adequate soil moisture needed to cool plants through transpiration. Yield potential will begin to decrease rapidly without rain in the coming weeks. Very little rainfall was experienced from Hurricane Ida in the Virginia-Carolina region. Issues with spider mites and lesser cornstalk borer have been minor and erratic but these pests could increase in prevalence in the coming weeks in absence of rainfall. While aflatoxin is typically not a major issue in the upper portion of the Virginia-Carolina region, continued dry weather could increase incidence, especially in the lower portion of the region. Scattered rain is expected during the latter portion of the week of September 6.

Peanuts at Wakefield and Lewiston-Woodville have not reached adequate heat unit accumulation for optimum pod maturity (2500 GDD_{56}) even if plants emerged in early May (GDD_{56} values begin when peanuts emerge and not when planted.) Peanuts emerging May 1 have adequate GDD_{56} at Wallace but need additional accumulation if emerging May 16 or later. Heat unit accumulation for peanuts emerging May 1 or May 16 is adequate at Orangeburg. Heat units are considered a starting point for estimating pod maturity. In most fields, optimum pod maturity based on pod mesocarp color will occur at some point after 2500 GDD_{56} are reached because of biotic and abiotic stresses that often occur at various points during the growing cycle. However, peanuts receiving consistent and well-timed irrigation often reach maturity right at 2500 GDD_{56}. Examples of pod maturity from across the region are presented in the figures.

Growers continue to manage leaf spot disease with fungicides and in most instances are making their last sprays. This could change if the balance of September is unusually warm and wet. Damage from southern corn rootworm has been observed in samples used for pod maturity but the percentage is low thus far. Some pathogens have been observed in pods and on kernels.

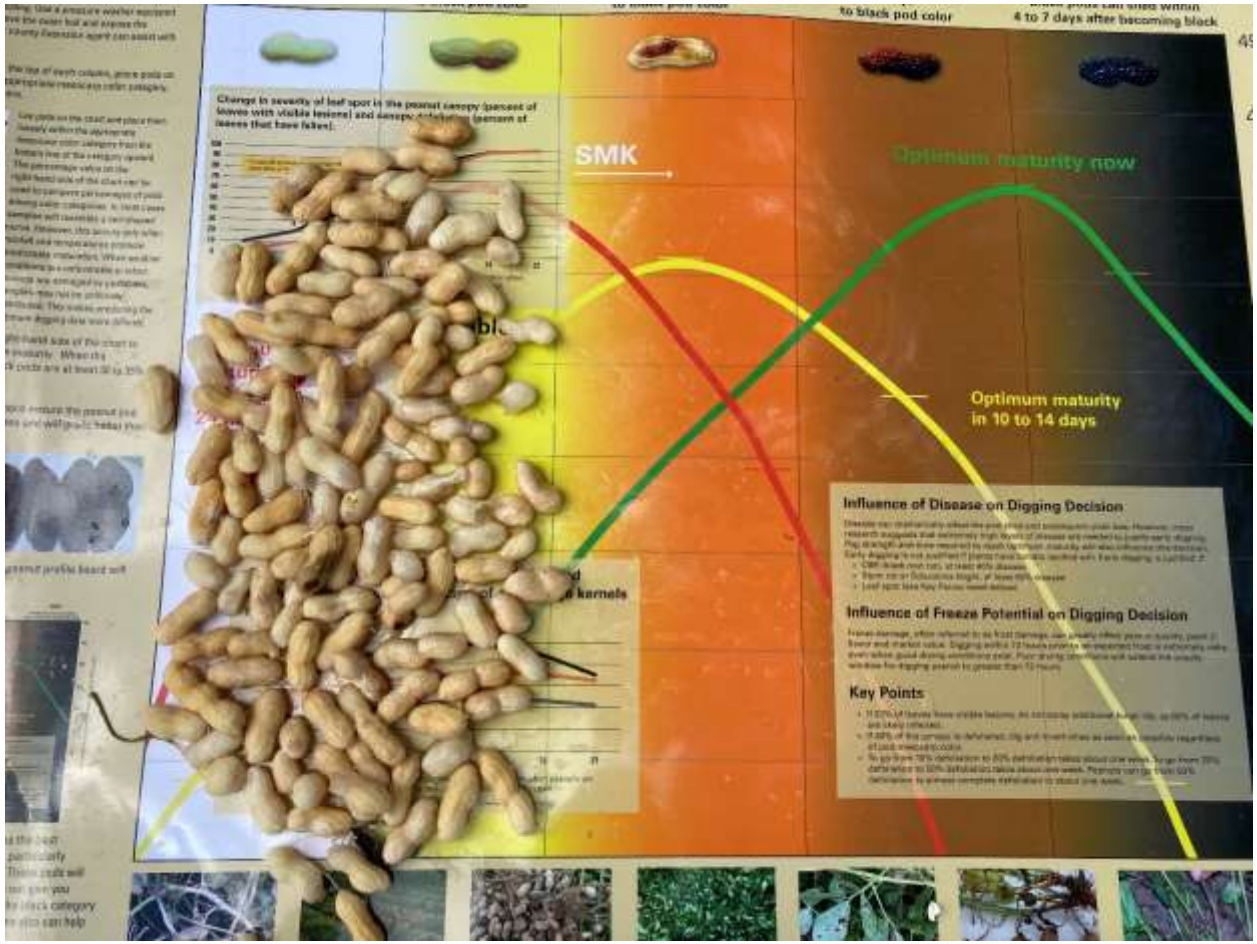
Estimated yield potential continues to be 4,480 kg/ha (4,000 lbs/acre.) But extended dry weather will decrease this estimate. Estimates of market type varieties grown in the region remains the same. Estimated land area planted to peanuts in North Carolina, South Carolina, and Virginia is 42,500 ha (105,000 acres), 34,400 ha (85,000 acres), and 11,300 ha (28,000 acres), respectively.

Heat Unit Accumulation (HUA) and recorded rainfall at Wakefield (Virginia), Lewiston-Woodville and Wallace (North Carolina), and Orangeburg (South Carolina) in 2021.								
	Wakefield, VA		**Lewiston-Woodville, NC**		**Wallace, NC**		**Orangeburg, SC**	
Period or Month	**HUA**	**Rainfall**	**HUA**	**Rainfall**	**HUA**	**Rainfall**	**HUA**	**Rainfall**
	DD_{56}	inches	DD_{56}	inches	DD_{56}	inches	DD_{56}	Inches
May 1 through September 5	2463	21.86	2430	28.19	2593	24.07	2762	21.07
May 16 through September 5	2367	21.12	2322	27.06	2431	23.07	2587	19.64
June 1 through September 5	2161	20.00	2094	26.00	2162	22.03	2301	19.64
June 16 through September 5	1866	16.91	1807	18.13	1847	17.07	1961	14.49
May	302	1.85	336	2.19	430	2.04	460	1.43
June	589	4.16	576	12.31	621	6.64	677	6.12
July	744	11.69	725	5.40	741	9.75	778	7.57
August	765	5.98	737	8.21	746	5.74	782	5.94
September 1 through 5	82	0.20	77	0.08	80	0.33	93	0.01
August 20 through September 5	-	0.68	-	1.81	-	0.34	-	1.91

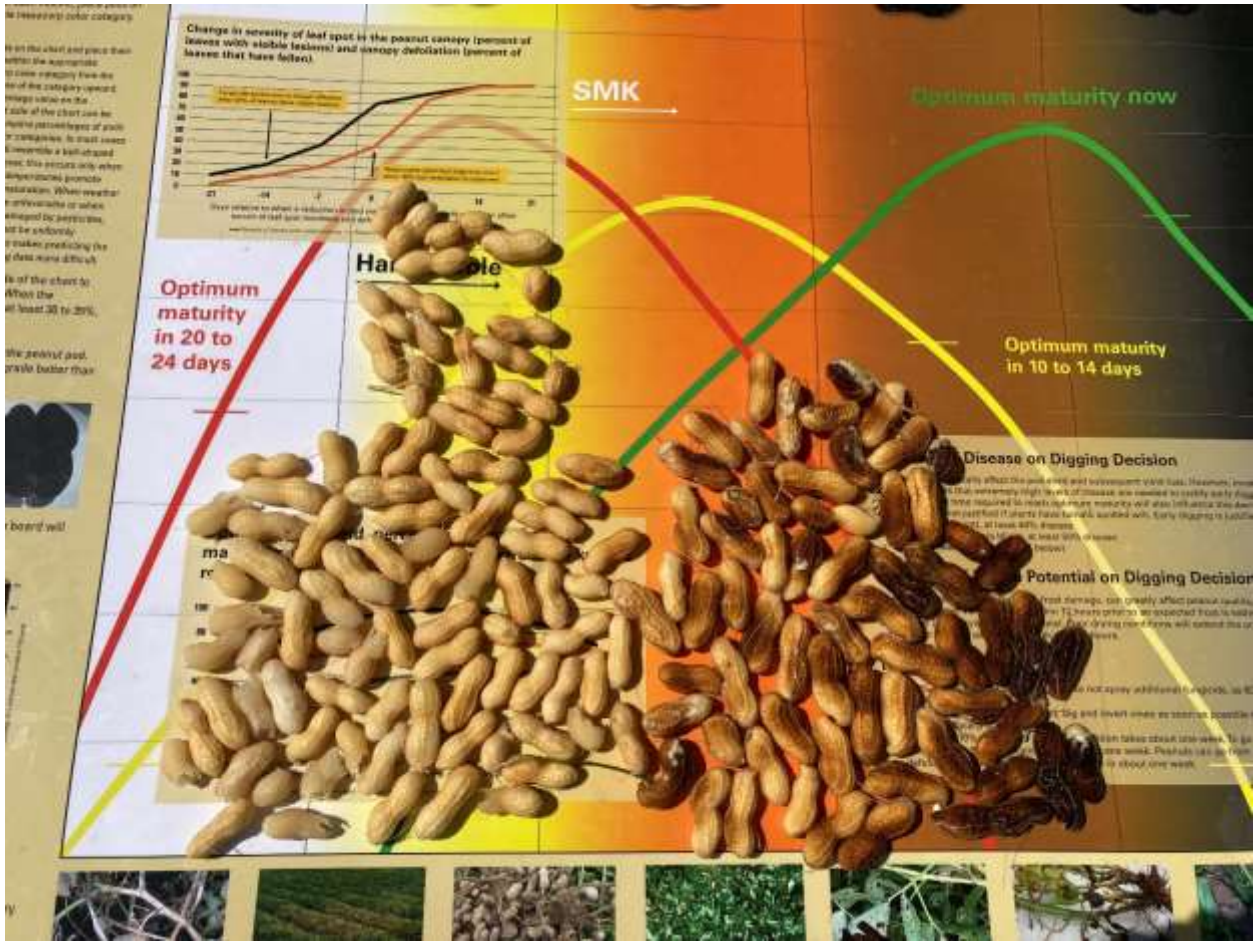
Peanuts planted in mid-May at Lewiston-Woodville, NC. Sample taken September 2.

Peanuts planted in early May near Whiteville, NC. Sample taken September 1.

Peanuts planted in early June near Edenton, NC. Sample taken on September 3.



Peanuts planted in early May near Edenton, NC. Sample taken September 3.



Water and heat stressed peanuts near Rocky Mount, NC on September 7.

Late-season potassium deficiency in peanuts.

Leaf spot disease in the peanut canopy near Whiteville, NC on September 2.

Disease on peanut kernels.

Pod damage caused by southern corn rootworm.

Peanut field near Suffolk, Virginia on September 8.

Peanut field near Oak City, NC on September 8.