Rainfall continues to be variable across the region, especially in central North Carolina and the western portion of northeastern North Carolina and Virginia. Rainfall has also been variable across South Carolina. Rainfall from locations in North Carolina is presented in Table 1. Heat unit accumulation has reached 2500 DD_{56} across North Carolina (Table 2). In Virginia, accumulation is just under this threshold. A higher number of heat units has been obtained in South Carolina at this point in the season. The most popular Virginia market type variety is Bailey II. This variety requires a minimum of 2500 DD_{56} to reach optimum maturity. Based on an average accumulation of 24 DD_{56} per day for this time of the cropping cycle, peanut in 2023 may be 7 to 11 days later reaching optimum maturity compared with 2022. NC State Extension agents and private consultants have indicated that peanut maturity in 2023 is 5 to 7 days behind that of 2022. However, some peanuts have reached optimum maturity across the region. Dry weather and other stresses can delay the maturation process as the season progresses. The delay in maturation observed for peanuts emerging around May 1 may be longer than potential delays for peanuts emerging later in May and in June. Since mid-June, heat unit accumulation has been similar in 2023 compared with 2022.

With the exception of the final spray for leaf spot disease, growers have completed their pest management practices for the cropping cycle. As a whole, peanuts have been protected well from disease and insect pests. Some fields are showing signs of injury from nematodes. With the exception of late-season escapes of annual grasses and sicklepod, the vast majority of fields do not have appreciable infestations of weeds. Spider mites have caused damage in some fields. However, damage is often isolated in sections of fields.

Digging has begun in some areas of the region but remains at less than 5% of planted area. This will likely increase during the week of September 18 with many growers going at full speed during the week of September 25. In North Carolina, peanut in the vast majority of fields appear to be at least two weeks away from optimum maturity at the time of this report.

Even though dry pockets continue to exist, rainfall during the week of August 28 and weekend of September 9 has been important for the peanut crop across the Virginia-Carolina region. The yield estimate for the region remains at 4,536 kg per hectare (4,050 pounds per acre).

Table 1. Rainfall in 2023 from May 1 through September 10 and from September 1 through September 10 at six locations in North Carolina.			
Year	**Location**	**Rainfall in inches (mm) May 1 – September 10**	**Rainfall in inches (mm) September 1-10**
2023	Lewiston-Woodville	15.10 (383)	1.17 (30)
2023	Rocky Mount	16.74 (425)	1.16 (30)
2023	Kinston	19.08 (485)	0.15 (4)
2023	Clinton	25.12 (638)	1.36 (35)
2023	Kenansville	27.30 (693)	1.08 (27)
2023	Whiteville	15.74 (400)	1.65 (42)

Table 2. Heat unit accumulation in 2022 and 2023 from May 1 through September 10 at five locations in North Carolina and one location in Virginia.		
Location	**Heat units (DD_{56}) May 1 – September 10, 2022**	**Heat units (DD_{56}) May 1 – September 10, 2023**
Suffolk	2604	2448
Lewiston-Woodville	2744	2573
Rocky Mount	2826	2606
Kinston	2895	2682
Clinton	2902	2628
Whiteville	2971	2708

Peanut fields near Clarkton, North Carolina on September 11.

Peanut fields near Rocky Hock in northeastern North Carolina on September 2. These peanuts were under significant drought stress but received rain the week prior to when this image was recorded. Peanuts are in the process of recovering from drought. The damaged foliage was caused by prolonged drought stress.

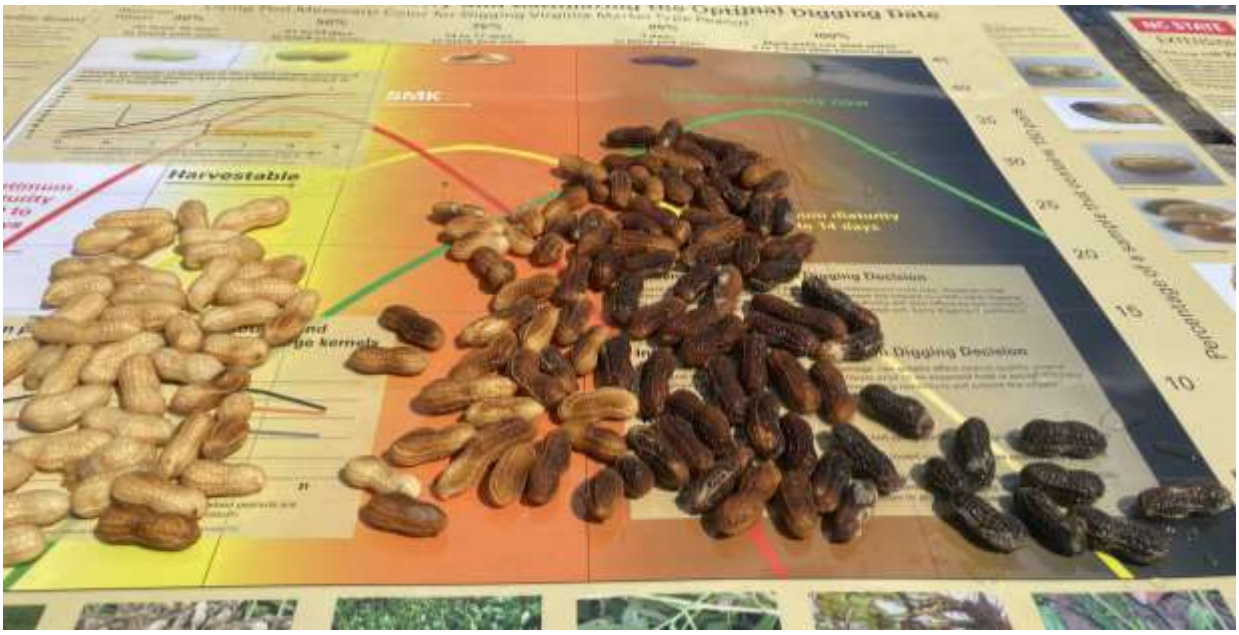
Peanut fields with spider mite infestations near Robersonville in northeastern North Carolina on September 13.

Peanut field near Oak City, North Carolina with areas of nitrogen deficiency due to issues with inoculant for biological nitrogen fixation applied at plating.

Pod mesocarp color on September 7 for the Virginia market type variety Bailey II planted in mid-May near Lewiston-Woodville, North Carolina under dryland and irrigated production. These peanuts will likely be dug in early October. Note that peanuts that were irrigated are slightly more mature than dryland peanuts.


Using Pod Mesocarp Color for Digging Virginia
Maximum Weight
30%
At least 35 days to black pod color
50%
21 to 24 days to black pod color
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 in 20 to 24 days
Bailey II
Sub-Surface Drip
Influence of Freeze Potential on Digging Decision
Percentage
45
40
15
10
5

Pod mesocarp color for the variety Bailey II on September 12 near Clarkton in Bladen County. These images are from three different fields.




Harvestable
Optimum maturity
in 50 to 54 days