

Numerous peanut fields were dry across the Virginia-Carolina region through the weekend of August 26. Rainfall during the previous two weeks was limited and non-existent in some areas. There continues to be dry pockets, especially in northeastern North Carolina and the western production area in Virginia. Rainfall from May 1 through August 28 in North Carolina is presented in the tables. A considerable amount of the rainfall observed in August occurred from August 26-28. Much of August was dry across North Carolina and portions of Virginia and South Carolina. Additional rain is expected in the region from Hurricane Idalia, especially in South Carolina and central and southeastern North Carolina. Estimates range from less than one inch (25 mm) to ten inches (250 mm) across the Virginia-Carolina region from this tropical event. Actual rainfall will vary based on the pace and direction of the storm's track.

Pod development for the peanut variety Bailey II under dryland conditions over five planting dates (May 5 through July 2) is presented in several images. Images were recorded on August 28. Peanut yield across the region is often lower when peanut is planted in June compared with May plantings.

Heat unit accumulation from May 1 through August 28 in 2023 is also provided. A contrast between 2022 and 2023 growing cycles at Lewiston-Woodville in northeastern North Carolina and Whiteville in southeastern North Carolina is provided. Pod mesocarp color for peanuts near Whiteville, North Carolina (southeastern portion of the state) for the varieties Bailey II and Walton are provided for 2022 and 2023 growing cycles. Peanuts were sampled for maturity on August 30 of each year. The planting date was May 8 during both years. Pod mesocarp color is a good indicator of pod maturity and is used predict the optimum date for digging pods and inverting vines. These images suggest that the 2023 peanut crop is approximately one week behind development in 2022.

With the exception of dry conditions, peanut fields are relatively weed-free and peanuts have been protected from disease. Damage from southern corn rootworm and spider mites has occurred in some areas of the region. Foliar-feeding insect infestations have been relatively low across much of the region in 2023.

Growers have completed their fifth spray (bi-weekly schedule) for early leaf spot, late leaf spot, and southern stem rot (white mold) protection. Growers in South Carolina have completed their sixth spray in some fields. Conditions for leaf spot development have been variable across the region. However, dew points have been relatively high and conditions favorable for leaf spot epidemics to continue even though fields are experiencing drought stress. In some cases, growers have been confronted with the decision to continue spraying for disease and risk flaring spider mites or allowing peanuts to be unprotected from pathogens. Fortunately, in many areas of the region that are dry, growers have not needed to apply pyrethroid insecticides to control tobacco budworm, corn earworm, or fall armyworm. Additionally, the insecticide chlorpyrifos is no longer available to suppress the soil insect pest southern corn rootworm. While there is concern about the impact of not having this insecticide to protect peanut from lesser corn stalk borer and burrower bug in dry fields, this insecticide has historically caused spider mite populations to build rapidly. Rainfall

during the weekend of August 26 through the week of August 28 will curtail development of spider mites across many areas of the region. Rainfall from remnants of Hurricane Idalia will also limit further damage from spider mites and lesser corn stalk borer.

Rainfall during the week of August 28 has been valuable in maintain growth and development and breaking the drought experienced during much of August. In central and southeastern North Carolina and South Carolina, the remnants of Hurricane Idalia have resulted in wet soil conditions as we move into September. The yield estimate for the region is 4,536 kg per hectare (4,050 pounds per acre).

Table 1. Rainfall in 2023 from May 1 through August 28 and from August 1 through August 28 at six locations in North Carolina. These data do not include rainfall from the remnants of Hurricane Idalia.

Year	Location	Rainfall in inches (mm) May 1 – August 28	Rainfall in inches (mm) August 1 - August 28
2023	Lewiston-Woodville	12.41 (315)	5.76 (146)
2023	Rocky Mount	12.55 (319)	3.07 (78)
2023	Kinston	12.90 (328)	2.87 (73)
2023	Clinton	18.10 (460)	2.98 (76)
2023	Kenansville	16.80 (427)	5.75 (146)
2023	Whiteville	14.10 (358)	1.67 (42)

Table 2. Heat unit accumulation in 2022 and 2023 from May 1 through August 28 at five locations in North Carolina and one location in Virginia.

Location	Heat units (DD₅₆) May 1 – August 28, 2022	Heat units (DD₅₆) May 1 – August 28, 2023
Suffolk	2417	2168
Lewiston-Woodville	2466	2190
Rocky Mount	2547	1949
Kinston	2620	2027
Clinton	2613	1998
Whiteville	2680	2046

Peanuts near Hamilton, North Carolina on August 24 suffering from drought and high temperatures.





Peanuts near Roxobel, North Carolina on August 23 under drought stress.



Peanuts near Conway, North Carolina on August 23 under drought stress.



Peanut field near Bladenboro, North Carolina on August 29. Peanuts in this area of North Carolina have received adequate rainfall over the past month to optimize growth and development.



Pod development for peanuts planted at Lewiston-Woodville, North Carolina over five planting dates from May 5 through July 2. Images were recorded on August 28.

Peanuts planted May 5



Peanuts planted May 14



Peanuts planted June 1



Peanuts planted June 16

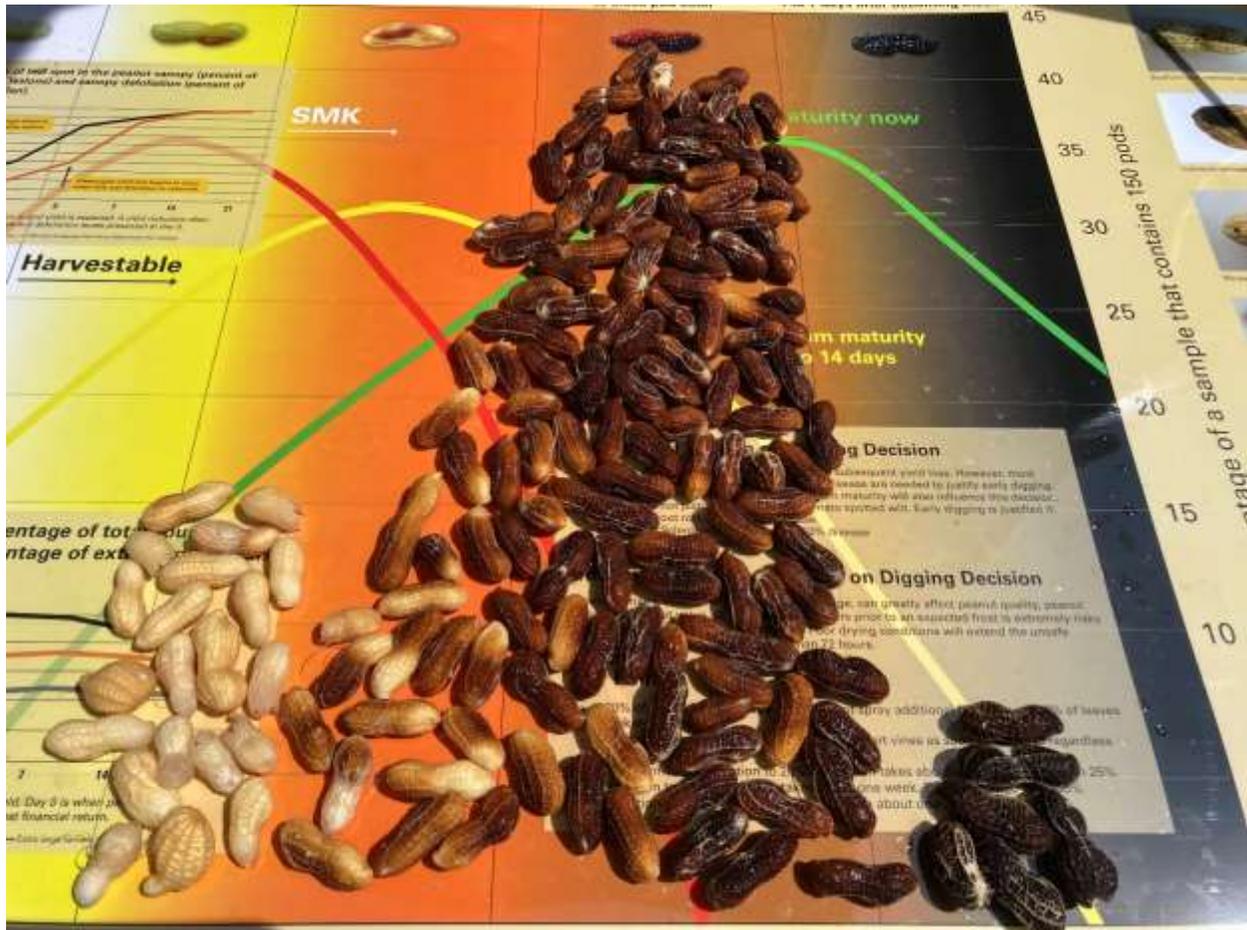


Peanuts planted July 2

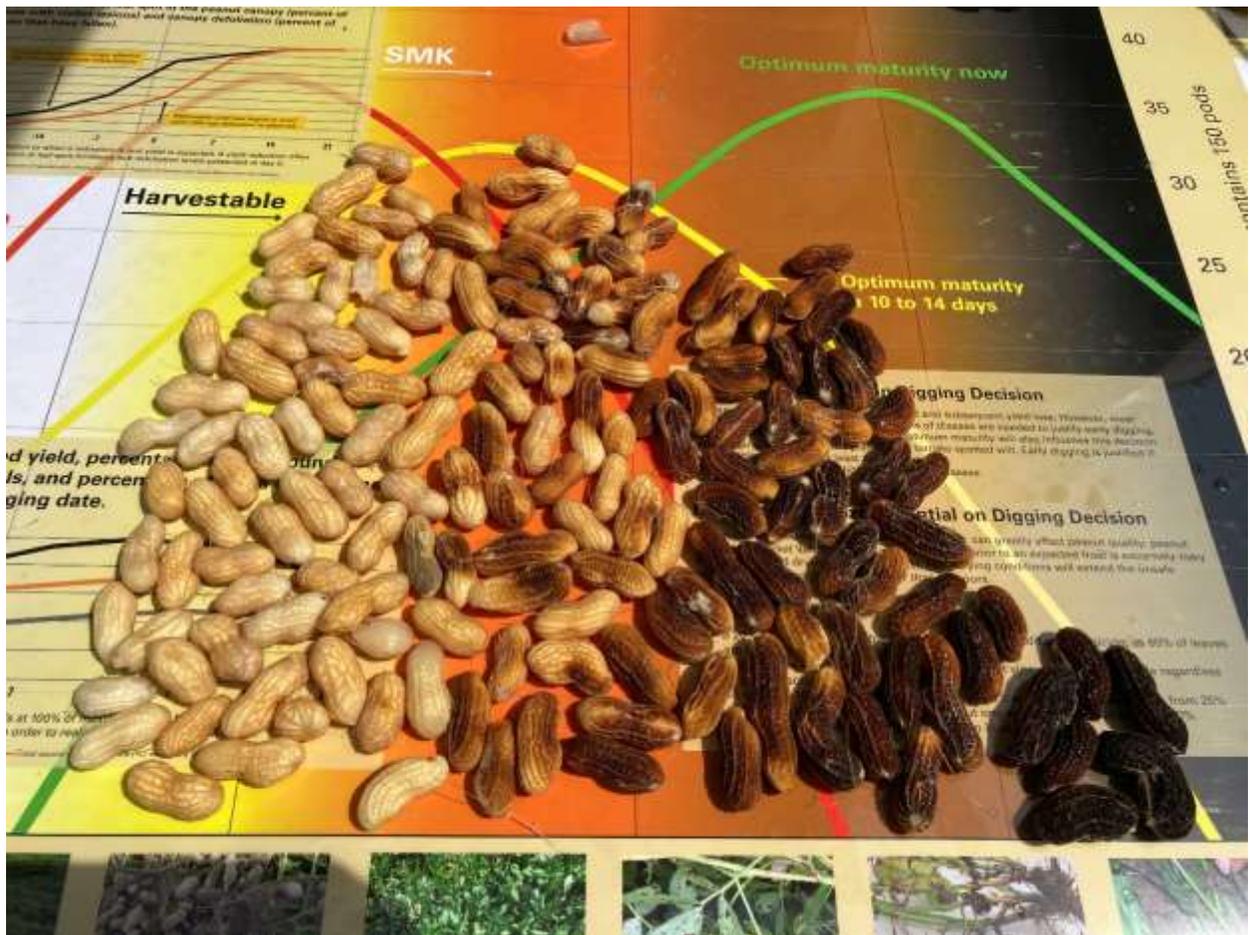


Pod maturity at Whiteville, North Carolina on August 30 of 2022 and 2023 for the variety Bailey II and Walton planted during the first week of May during both years. A darker pod mesocarp color indicates a more mature pod. Pod mesocarp is a good indicator of kernel development and weight.

Bailey II in 2022



Walton in 2022



Walton in 2023



Pod damage caused by southern corn rootworm.

