Recent rainfall has eliminated drought in almost every area of the Virginia-Carolina region. Even though some pockets received over 12 inches of rain from Tropical Storm Debby, most amounts were more modest than expected prior to the storm reaching this production area. The lower area of the region, in particular, benefited from the rainfall. However, where rainfall was intense and ponding of fields occurred, some yield loss will be experienced. Lack of appreciable wind from the storm minimized structural damage, although tornadoes were spawned in the coastal plain of the region. Rainfall amounts for the month of August, which included Debby are presented in the table.

Growers in the lower Virginia-Carolina region have moved to their fifth fungicide spray for leaf spot and stem rot disease while growers further north have are planning their fourth spray in the schedule (e.g., fungicides are most often sprayed on 14-day intervals.) Rainfall in late July and early August, including Debby, has resulted in delays in fungicide applications. This has occurred even for growers with adequate equipment to apply fungicides in a timely manner. Some growers have applied only two sprays, and peanuts in these fields are vulnerable to epidemics developing given the rainfall amounts, temperatures and relative humidity in the peanut canopy. Excessive vine growth in many fields has limited movement of fungicides to the base of the plant where leaf spot epidemics begin and where southern stem (e.g., white mold) will be present. For growers in the central and northern areas of the region, with a combination of cooler temperatures in the coming week, a dense canopy, and wet soils, the Sclerotinia blight, caused by a soil-borne pathogen, most likely will become active in fields with a history of this disease. Growers will be challenged to get fungicide for all three of these diseases into the canopy where they are needed. In many fields, it could be another week before fungicides can be applied by ground equipment even if no more rain is received at the present time. Some growers and their advisors have been inquiring about the efficacy of fungicides applied using fixed-wing aircraft. The general consensus is that spray volumes and spray pressure at the peanut canopy level are too low to provide adequate coverage of foliage with fungicides, especially lower in the canopy where epidemics begin. The extent of impact of periods of time where peanuts are unprotected with fungicides due to gaps in protection is not known. Growers are encouraged to apply fungicides on a “tighter” schedule within product label specifications to protect as much of the canopy as possible from disease. Fungicides with as much curative activity as possible are encouraged.

Many growers are making their second application of prohexadione calcium, a plant growth regulator that minimizes excessive vine growth by inhibiting internode elongation. Some growers have inquired as to whether or not applications at this point are warranted. In cases where this plant growth regulator was applied on time at 50% row closure (e.g., when 50% of vines from adjacent rows are touching) a second application can be effective in minimizing regrowth and maintaining a less robust canopy. However, for growers who did not apply prohexadione calcium in a timely manner, applications at this point are not recommended. Although intuitive, it is important to note that this plant growth regulator does not shrink plants but prevents excessive vine growth. There is no advantage to late-season applications to peanuts that are already large and approaching the final stages of vegetative growth.

Corn earworm, tobacco budworm and to a lesser extent fall armyworm were developing in some areas of the region. In most cases, growers applied insecticide to suppress these insects prior to excessive rain from tropical weather. It is also the case that heavy rains, especially thunder showers with relatively high intensity, can wash worms and caterpillars from the canopy. Growers are encouraged to scout fields as soon as they can as fields dry, but application of insecticides may not be needed. The threshold for insecticide sprays in North Carolina, for

example, in August is 12 worms/foot of row using a beat cloth. The excessive vine growth in many fields also will buffer against insect damage if outbreaks occur.

Some fields have escaped weeds, primarily Palmer amaranth and annual grasses. There are no herbicides at this point in the season that will adequately control Palmer amaranth. In many cases, seeds that are beginning to be produced for this weed are viable. However, applications of selective grass herbicides can suppress escaped annual grasses and to minimize yield loss during digging and vine inversion.

Heat unit accumulations from May 1-August 12, May 15-August 12, and June 1-August 12 are provided in the table. As mentioned previously, Virginia market type varieties require approximately 2,600 DD_{56} to reach optimum maturity. While low temperatures and dry conditions can delay maturity, water-logged fields and cloudy weather can also slow the maturation process. Heat unit accumulation is one of several indicators of when peanuts will reach optimum maturity. In many cases, peanuts will reach optimum maturity a number of days after reaching the 2,600 DD_{56} mark for Virginia market types. This is because heat units continue to accumulate even though stresses can occur during the cropping cycle (e.g., drought, excessive moisture, etc.)

Yield potential for peanuts in the region is 4,340 kg/ha (4,050 lbs/acre). While conditions became more favorable for peanut growth and development during the last two weeks of July, conditions have been less than ideal for peanut growth and development in many areas of the region in August. Fields that are wet will prevent growers from continuing their fungicide sprays. If growers can get into fields by early next week, yield potential will remain at the current level. If cloudy weather and additional rain occurs, yield potential will decrease. Yield potential may decrease further based on assessments of how peanuts recover from Debby.

Rainfall in May, June, July, and through August 12 at selected locations in North Carolina in 2024. Rainfall includes amounts from Hurricane Debby.

Location	Rainfall in inches (mm) in May	Rainfall in inches (mm) in June	Rainfall in inches (mm) in July	Rainfall in inches (mm) from August 1-12
Lewiston-Woodville	3.84 (96)	1.33 (34)	10.50 (267)	4.25 (108)
Rocky Mount	5.60 (142)	2.07 (53)	12.87 (327)	4.62 (117)
Kinston	6.38 (162)	2.38 (61)	9.75 (248)	9.28 (236)
Clinton	3.99 (101)	0.80 (20)	11.84 (301)	9.23 (234)
Wallace	6.32 (161)	0.74 (19)	7.42 (188)	8.75 (222)
Whiteville	4.40 (112)	2.08 (53)	9.21 (234)	12.26 (311)

Heat unit accumulation (DD_{56}) at selected locations in North Carolina in 2024 from May 1, May 15, and June 1 through August 12.

Location	May 1-August 12	May 15-August 12	June 1-August 12
Lewiston-Woodville	2096	1899	1655
Rocky Mount	2141	1935	1674
Kinston	2167	1955	1682
Clinton	2172	1959	1675
Wallace	2124	1920	1642
Whiteville	2171	1963	1670

Peanut fields near Westbrook in southeastern North Carolina on August 12. Note the water damage in the second image. Development of one of the most mature pods on a plant is also shown.

Peanut field with ponded water near Faison in central North Carolina on August 12.

Peanut fields near Clinton in the central North Carolina coastal plain on August 12.

Peanut field near Fremont in central North Carolina on August 12.

Peanut field near Wilson in central North Carolina on August 12.

Peanut field with escaped Palmer amaranth near Mount Olive in central North Carolina on August12.

Peanut fields near Oak City in northeast North Carolina on August 13.

Peanut field near Robersonville in northeast North Carolina on August 13.

Peanut field near Hamilton in northeastern North Carolina on August 13.

Peanut field on August 14 near Roanoke Rapids in northeastern North Carolina. This field is relatively close to the North Carolina and Virginia state line.

Peanut pods from plants in a field near Lewiston-Woodville, North Carolina on August 13.