

Dry pockets continue to exist across the southern area of the Virginia-Carolina region. However, much of the southern, central and northern areas of the region have received adequate rainfall. In some areas, especially the central coastal plain of North Carolina, rainfall has been excessive. Vine growth in many areas reflects the ample soil moisture that has been in place for the past three weeks. While many growers have applied prohexadione calcium to prevent excessive vine growth, other growers were unable to make timely applications of this plant growth regulator because field conditions were too wet to make applications.

Growers in the lower Virginia-Carolina region have moved to their fourth fungicide spray for leaf spot and stem rot disease. In the central and northern areas of the region, growers are in the process of making their third application for these diseases. Some growers are now behind in their sprays due to excessive rainfall. These growers are shifting to fungicides with curative activity to avoid establishment of epidemics of the pathogen that causes leaf spot disease in the peanut canopy. These growers will need to make sure fungicide sprays for the balance of the season are applied in a timely manner.

Corn earworms have been found in some fields across the region. Growers have been proactive in spraying insecticides that give broad spectrum control. Rain showers can also wash worms from the canopy to the soil. Concerns over flaring spider mites has decreased dramatically with recent rainfall patterns. Pod damage from lesser cornstalk borer will likely be lower due to rainfall.

Tomato spotted wilt incidence has become more apparent across the region. Expression of this disease is dependent upon thrips control early in the season with systemic insecticides, planting date, tillage system, plant population, and variety selection. Adequate soil moisture has allowed peanut health to increase, enabling plants to compensate for higher levels of tomato spotted wilt virus within the plant.

Some fields have peanuts in low areas that are yellow and may have yield reductions due to ponding of water for an extended periods of time. Other fields have been actively growing and a pale green or yellow cast is present. This is likely a result of the concentration of chlorophyll in plants and not stress. There are some fields that are expressing nitrogen deficiency, toxicity from micronutrients (boron in particular), and manganese deficiency. These fields are a low percentage of total production. Growers in most cases have been able to address nutrient deficiencies in a timely manner. The week of July 29 has resulted in clearer periods of the day which will increase photosynthesis and allow fields do continue drying so that growers can make applications of fertilizer where needed and get back on a schedule for fungicide applications.

Peanut maturity is affected primarily by temperature, measured as heat unit accumulation (base of 56 F and ceiling of 95 F, referred to as DD<sub>56</sub>) and soil moisture. Shocks such as pest damage or improper use of pesticides and cool temperatures in the fall can also disrupt the pod maturation process. Heat unit accumulation from May 1-July 31, May 15-July 31, and June 1-July 31 is provided in the table. Virginia market type varieties require approximately 2,600 DD<sub>56</sub> to reach optimum maturity, assuming soil moisture is adequate for growth during the entire cropping cycle. Growing degree day calculations begin at peanut emergence and not planting date.

Yield potential for peanut in the region is 4,340 kg/ha (4,050 lbs/acre). Conditions have become more favorable for peanut growth and development over the past two weeks.

**Rainfall in May, June, and July at selected locations in North Carolina in 2024.**

<b>Location</b>	<b>Rainfall in inches (mm) in May</b>	<b>Rainfall in inches (mm) in June</b>	<b>Rainfall in inches (mm) in July</b>
Lewiston-Woodville	3.84 (96)	1.33 (34)	10.50 (267)
Rocky Mount	5.60 (142)	2.07 (53)	12.87 (327)
Kinston	6.38 (162)	2.38 (61)	9.75 (248)
Clinton	3.99 (101)	0.80 (20)	11.84 (301)
Wallace	6.32 (161)	0.74 (19)	7.42 (188)
Whiteville	4.40 (112)	2.08 (53)	9.21 (234)

**Heat unit accumulation (DD<sub>56</sub>) at selected locations in North Carolina in 2024 from May 1, May 15, and June 1 through July 31.**

Location	May 1-July 31	May 15-July 31	June 1-July 31
Lewiston-Woodville	1815	1618	1374
Rocky Mount	1865	1659	1398
Kinston	1893	1678	1405
Clinton	1898	1685	1401
Wallace	1850	1646	1368
Whiteville	1894	1686	1393

Water standing in a peanut field near Windsor, North Carolina during the week of July 16.







Peanut field near Oak City in northeastern North Carolina on July 30.



Peanut pods from a field near Rocky Mount, North Carolina on July 30. This field was planted in early May.





Pods from peanut plants on July 29 in a field near Whiteville, North Carolina in southeastern North Carolina.





Peanut vines after fungicide application near Whiteville, North Carolina on July 29. Note the excessive vine growth demonstrated by the traffic lane.



Peanut field near Clinton, North Carolina in the central coastal plain on July 29.





Peanut field near Turkey, North Carolina with escaped Palmer amaranth plants on July 29.







Tomato spotted wilt in a field near Faison, North Carolina on July 29.





Peanuts in a field near Faison, North Carolina that are damaged by ponding of water.









Annual grass escape in a field near Faison, North Carolina on July 29.



Sicklepod, a troublesome weed in the V-C Region, after application of the synthetic auxin herbicide 2,4-DB.





Damage to the peanut canopy from foliar-feeding insects in southeastern North Carolina.



Boron toxicity in a peanut field near Clinton, North Carolina.

