Rainfall patterns have been good for both peanut growth and development and field operations to protect peanuts from disease in many areas of the V-C region. However, in some areas of the region, rain has not occurred since Tropical Strom Debby. While fields did need to dry after this weather event, additional soil moisture is needed to mature the crop. Temperatures have decreased to levels that are less favorable for leaf spot and southern stem rot (also referred to as white mold.) However, cooler temperatures favor the disease Sclerotinia blight, especially in fields with adequate soil moisture. The combination of moist and in some cases wet soils and cooler temperatures have created conditions promoting epidemics of this disease.

Many growers in the lower V-C region will begin digging pods and inverting vines within the next week. In other areas, growers are making a final spray to protect peanuts from disease. The major challenge at this point is cooler temperatures resulting in relatively low heat unit accumulation and delays in pod maturation. While some fields in the lower V-C region have reached optimum maturity, the vast majority of fields in the middle and upper V-C region need at least 10 days of adequate temperatures to reach optimum maturity for digging and vine inversion. Dry soil conditions also slow the maturation process.

Heat unit accumulation from May 1-September 8, May 15-September 8, and June 1-September 8 is provided in the table. As noted in previous reports, Virginia market type varieties require approximately 2,600 DD₅₆ to reach optimum maturity. Several images of pod maturity (based on pod mesocarp color) from fields across the coastal plain of North Carolina are provided. Rainfall for May, June, July, and August as well as the first week of September is provided in one of the tables. While rainfall amounts are relatively high in August, the majority of rain in that month was received in early to mid-August. Some areas of the region have gone almost four weeks without rain.

Yield potential for peanuts in the region is 4,340 kg/ha (4,050 lbs/acre). Conditions improved initially since Tropical Storm Debby. However, areas of some peanut fields have been damaged by waterlogged soils. Also, some areas of the region have not received rainfall since the tropical storm.

| Location | Rainfall in inches (mm) in May | Rainfall in inches (mm) in June | Rainfall in inches (mm) in July | Rainfall in inches (mm) in August | Rainfall in inches (mm) from September 1-8 |
|------------------------|---|--|---------------------------------------|--|---|
| Lewiston- Woodville | 3.84 (96) | 1.33 (34) | 10.50 (267) | 4.84 (123) | 0.49 (12) |
| Rocky Mount | 5.60 (142) | 2.07 (53) | 12.87 (327) | 5.82 (148) | 1.21 (31) |
| Kinston | 6.38 (162) | 2.38 (61) | 9.75 (248) | 9.81 (239) | 0.64 (16) |
| Clinton | 3.99 (101) | 0.80 (20) | 11.84 (301) | 9.23 (234) | 0 (0) |
| Wallace | 6.32 (161) | 0.74 (19) | 7.42 (188) | 9.86 (250) | 0.80 (20) |
| Whiteville | 4.40 (112) | 2.08 (53) | 9.21 (234) | 12.7 (323) | 0 (0) |

Rainfall in May, June, July, August, and September 1-8 at selected locations in North Carolina in 2024.

Heat unit accumulation (DD₅₆) at selected locations in North Carolina in 2024 from May 1, May 15, and June 1 through September 8.

| Location | May 1-Sep 8 | May 15-Sep 8 | June 1-Sep 8 |
|--------------------|-------------|--------------|--------------|
| Lewiston-Woodville | 2563 | 2366 | 2122 |
| Rocky Mount | 2606 | 2400 | 2139 |
| Kinston | 2570 | 2458 | 2185 |
| Clinton | 2686 | 2473 | 2195 |
| Wallace | 2649 | 2445 | 2167 |
| Whiteville | 2701 | 2493 | 2200 |

Sicklepod in a peanut field near Tarboro in the upper V-C region. The image was recorded on September 5.



Foliar-feeding insect near Tarboro in northeastern North Carolina on September 5. This insect is either corn earworm or tobacco budworm. Minimal damage from this complex of insects has been observed across much of the region.



Deposition of fungicide on peanut leaves. The majority of fungicides are protectants with minimal curative action.





Leaf scorch in a peanut field near Tarboro in northeastern North Carolina. Note the dried fungicide solution on the leaves.

Sclerotinia blight disease in a peanut field near Lewiston-Woodville in northeastern North Carolina on September 11. Note the black fruiting bodies on the dead stem.



Peanut field near Tarboro in northeastern North Carolina on September 5.



Sample showing pod maturity based on pod mesocarp color on September 5. The first image is of peanuts planted May 5. The second image is of peanuts planted May 30. A difference in planting date in May of 3 to 4 weeks generally results in a difference in pod maturity of approximately 10 days in the fall.







Maturity of the variety Bailey II followed by the newer variety NC 20 on September 5.



Maturity of the variety Bailey II planted May 2 near Whiteville in southeastern North Carolina with the sample taken September 4.



Maturity of the variety Sullivan near Council in southeastern North Carolina on September 10. Peanuts were planted in mid-May.



Areas of a field near Enfield in the upper area of the V-C region on September 11. The second image shows damage from ponding of water earlier in the cropping cycle and damage from sprayer traffic under wet soil conditions.





Peanuts expressing symptoms of drought stress on September 10 near Council in southeastern North Carolina. This area of the region has not received rainfall since Tropical Storm Debby.



Peanut field near Hamilton on northeastern North Carolina on September 11.

Deer damage in a field near Hamilton in northeastern North Carolina.



Splitting of a stem caused by zinc toxicity. Peanuts are very susceptible to elevated levels of zinc in soil, especially when soil pH is low.