

Rainfall from the recent low-pressure system during the weekend of September 23 resulted in variable rainfall across the region. Less rain was observed in South Carolina and portions of southeastern North Carolina compared rain in the central and northern areas of the region (Table 1). Heat unit accumulation has been lower during the past 10 days (September 15 through September 25) than during the period of between from September 4 through September 14 across North Carolina. The pace of pod maturation has slowed to about half when comparing these respective times (22 DD<sub>56</sub> per day versus 12 DD<sub>56</sub> per day, respectively.) Heat unit accumulation between September 26 and October 1 is likely will be 10 to 12 DD<sub>56</sub> per day across the region. A minor warming trend is expected during the week of October 2.

Leaf spot and stem rot diseases as well as spider mites are less active at the current time compared with early and mid-September. However, warmer temperatures during the week of October 2 could cause epidemics to begin. Under warm conditions, the percentage of lesions associated with leaf spot disease will double on a weekly basis. Similarly, defoliation of the peanut canopy doubles with each week that passes by. Sclerotinia blight incidence has increased in some fields across the region, especially in the northern section of the region where there is a history of this disease. Many fields will be dug within the next two weeks and there will be a race between increased disease incidence and pod maturation and digging.

Approximately 15% of the peanut crop across the region has been dug and vines inverted. Less than 5% of the crop has been threshed. Rain from the recent low-pressure system has limited field operations since September 22.

The yield estimate for the region remains at 4,536 kg per hectare (4,050 pounds per acre). However, this estimate is contingent upon peanut pod maturity increasing at higher rates during the week of October 2 compared to rates during the week of September 25. In the absence of a sustained warming trend across the region, peanut in many fields will not reach optimum pod maturity and yield estimates will need to be lowered. Wet soils and cloudy conditions will also decrease the pace of pod maturation.

**Table 1. Rainfall in 2023 from May 1 through September 24 and rain from the recent low pressure system on September 22 and 23 for six locations in North Carolina.**

<b>Year</b>	<b>Location</b>	<b>Rainfall in inches (mm) May 1 – September 26</b>	<b>Rainfall in inches (mm) September 22 and 23</b>
2023	Lewiston-Woodville	19.34 (490)	3.75 (95)
2023	Rocky Mount	22.01 (559)	3.72 (94)
2023	Kinston	23.95 (608)	4.73 (120)
2023	Clinton	27.96 (710)	2.15 (55)
2023	Kenansville	30.55 (776)	2.49 (63)
2023	Whiteville	18.76 (477)	0.98 (25)

Leaf spot disease in the peanut canopy near Rocky Mount, North Carolina.



Pod rot in a peanut field near Rocky Mount, North Carolina on September 19.



Pod mesocarp color from a field near Rocky Mount, North Carolina for the variety Bailey II on September 19. Modest increases in pod maturity have been observed in many areas of the region during the month of September. A significant number of fields has approached optimum maturity but plants continue to need additional heat units to reach this desired goal.



Presence of the disease southern stem rot in the peanut canopy on September 27 near Lewiston-Woodville in northeastern North Carolina.



Sclerotinia blight disease in the peanut canopy on September 27 near Lewiston-Woodville. Field conditions for the past week have been favorable for this disease to develop.



Plant expressing symptoms caused by tomato spotted wilt in a field near Lewiston-Woodville on September 27.

