

Peanut yield in the Virginia-Carolina region is anticipated to be 4,030 kg/ha (3,600 pounds/acre). Weather conditions during the past two weeks have been generally unfavorable for field operations across much of the Virginia-Carolina region. Approximately 0.25% of the peanut remains to be harvested. Freeze damage and aflatoxin contamination were generally low across the region (less than 0.05% of total production.) Market grade characteristics (percentages of total sound mature kernels, extra large kernels, etc.) were good, and in general pod brightness was not extreme in either a positive or negative sense for the in-shell trade. Although there were pockets across the region where yield and market grades were less than ideal, these numbers reflect the overall average.

The peanut crop in the region was a challenge for a number of reasons during 2019. Planting was an issue for many growers. A significant amount of peanut was planted in early May with limited plantings in mid to late-May. Approximately 25% of peanut were planted past the normally recommended window of May across the region. Fifteen percent of planting occurred during the first two weeks of June.

In some areas, especially the northern portion of the Virginia-Carolina region, rainfall was excessive at various times during most of the season (Table 1). In the central and lower Virginia-Carolina region rainfall became limited later in the season for many growers. In some areas growers experienced drought for up to a month, although overall peanut received an adequate amount of rain. Rainfall from hurricanes was a greater issue in the central and lower Virginia-Carolina area.

Early season weed control and management of thrips was adequate across the region. Growers were able to control these pests and minimize negative impacts on yield. Lesser cornstalk borer and spider mites were an issue in some areas but were not widespread. Stem rot and leaf spot control was adequate overall but some fields had excessive leaf spot going into September. Delays in digging due to hurricanes and other rainfall events resulted in significant defoliation in some field and subsequent yield loss. Research and Extension personnel and agribusiness are investing resources in determining the cause of poor leaf spot control. With all major groups of pesticides (fungicides, herbicides, insecticides) evolved resistance in pests is a threat to efficient pest control and sustainability of peanut production systems.

A major concern in the Virginia-Carolina region was late plantings. As a general rule, planting in May results in the greatest and most consistent yields. Planting in June creates risk with respect to complete maturation of the crop. Fortunately, heat unit accumulation during September and October was higher than normal and allowed late planted peanut to reach optimum maturity prior to digging. Figure 1 includes average heat unit accumulation for the past 10 years (2009-2018) contrasted with heat unit

accumulation during 2018. Exceptional yields were obtained in some fields even when peanut was planted during the first or second week of June.

Hurricanes Florence and Michael impacted peanut in the region. Southeastern North Carolina and the northern belt of peanut production in South Carolina were hit the hardest by Florence. A small percentage of fields were flooded from water backing into fields from rivers, streams and other low areas but this tended to be minimal. Some ponding occurred from heavy rains, but the impact was less than expected. In fact, some areas of the central and northern section of the Virginia-Carolina area benefited from the outer bands of Hurricane Florence. This hurricane also arrived several weeks prior to major digging and threshing operations in North Carolina and Virginia but did impact operations in South Carolina where peanuts tend to mature earlier and harvesting operations begin more quickly. Hurricane Michael hit at a time when digging and threshing operations were in full force, and this storm, while containing less rain than Florence, had a negative impact on peanut. However, the overall impact of both storms could have been much more of an issue than was realized. Certainly for farmers that experienced flooding the impact was catastrophic. Some farmers experienced peanut yields that were lower than expected because fungicide programs were less effective than needed, especially when digging was delayed because of wet soil conditions. Weather conditions and favorability for field operations have been marginal throughout the harvest window even up until the present time.

The yield estimate of 4,030 reflects a combination of challenges from weather (hurricanes, drought during mid to late-summer, and excessive rain throughout the growing season in some areas, pod loss as a result of delayed digging because of wet fields and disease, and delays in planting.) The year was a challenge for farmers, especially harvesting the crop. Going into 2019 growers are concerned about contract prices due to significant stocks of peanut and increased production costs. Many of these growers experienced losses for crops other than peanut, most notably cotton, soybean, sweetpotato, and tobacco in the central Virginia-Carolina area.

Figure 1. Average heat unit accumulation from May 15 through November 1 at Lewiston-Woodville, NC in the upper Virginia-Carolina region. Green line represents average heat unit accumulation for a period of time during 2018 compared to the ten-year average from 2009-2018.

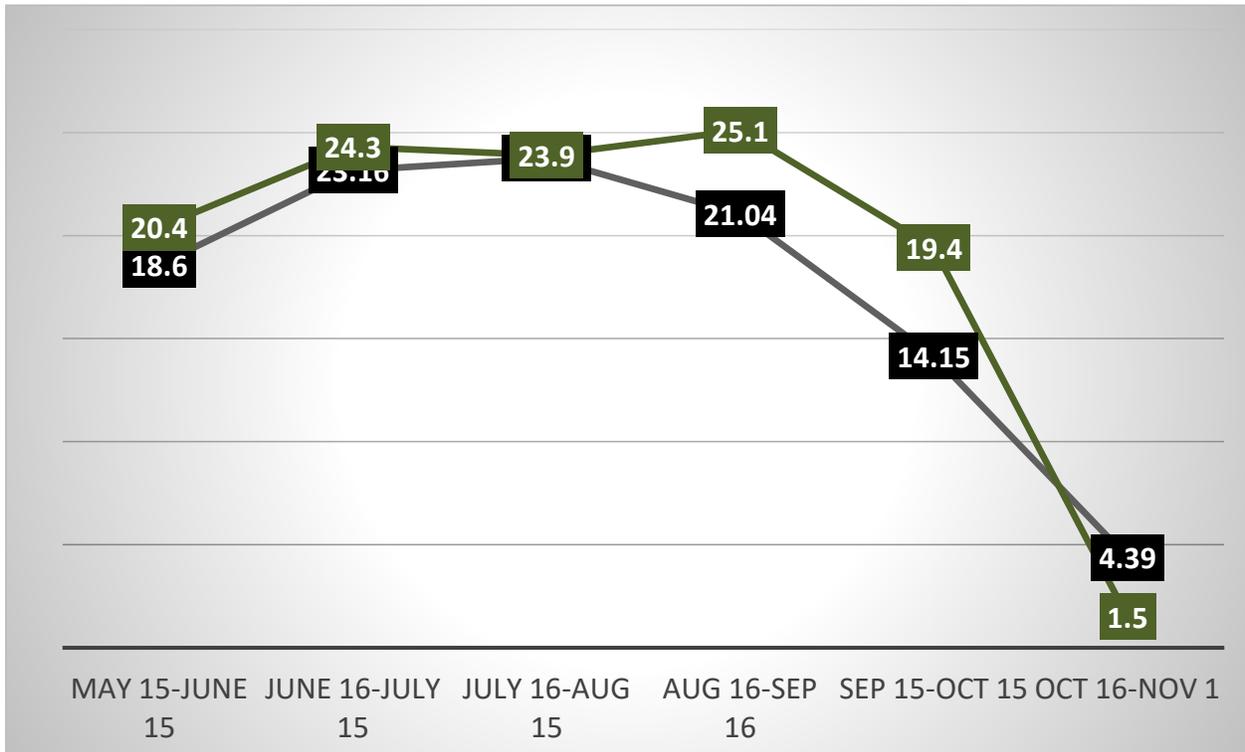


Table 1. Rainfall in the Virginia-Carolina region for each month from May through November 2019. Data are from the North Carolina State Climate Office, <https://climate.ncsu.edu/cronos>. Accessed November 28, 2018.

| Month | Wakefield, VA | Lewiston, NC | Goldsboro, NC | Whiteville, NC | Florence, SC | Orangeburg, SC |
|--------------------------|------------------|-----------------|------------------|-------------------|-----------------|-------------------|
| <i>Rainfall (inches)</i> | | | | | | |
| May | 8.7 | 9.8 | 6.8 | 5.9 | 4.1 | 7.7 |
| June | 4.9 | 5.6 | 0.8 | 4.0 | 6.4 | 3.6 |
| July | 9.6 | 11.5 | 7.7 | 4.0 | 7.1 | 6.6 |
| August | 5.6 | 6.2 | 10.1 | 6.0 | 1.7 | 1.3 |
| September | 4.9 | 5.8 | 24.8 | 23.6 | 10.4 | 5.5 |
| October | 4.7 | 3.0 | 4.0 | 1.5 | 4.7 | 2.2 |
| November | 6.1 | 3.8 | 6.7 | 0.8 | 4.4 | 3.4 |
| <i>Rainfall (mm)</i> | | | | | | |
| May | 221 | 249 | 173 | 150 | 104 | 196 |
| June | 125 | 142 | 20 | 101 | 163 | 91 |
| July | 244 | 292 | 196 | 102 | 180 | 168 |
| August | 142 | 158 | 256 | 152 | 43 | 33 |
| September | 125 | 147 | 629 | 599 | 264 | 140 |
| October | 119 | 76 | 102 | 38 | 119 | 56 |
| November | 155 | 97 | 170 | 20 | 112 | 86 |

Peanut seed prior to planting in early May, 2019 near Whiteville, NC.



Field being prepared for planting near Rocky Mount, NC during 2019.



Peanut at mid-season near Rocky Mount, NC during 2019.



Peanut being harvested near Gatesville, NC during 2019.

