

Approximately 98% of the peanut crop has been dug in the Virginia-Carolina region with 90% threshed. Weather patterns over the past week have been relatively good for field operations and growers have made solid advances in completing peanut harvest. Frost is not predicted until early during the week of November 14. However, some rain from Tropical Storm Nicole is expected across the Virginia-Carolina region on Friday November 11. Rainfall from this storm could delay final harvest of the peanut crop in the region.

Erratic peanut yields across the region have been associated with weather patterns throughout the growing season. Challenges were primarily from dry weather in some areas of the region, most notably sections of Virginia, in the central coastal plain of North Carolina and pockets of dry weather in South Carolina. However, even within areas of these three states that have received adequate rainfall when needed, dry pockets existed for prolonged period of time. The length of drought has varied considerably. Rainfall from the Hurricane Ian in late September was not excessive and was positive in most cases. Rainfall created soil moisture that enabled growers in many areas with dry soils to dig peanuts with less pod loss.

Variation in crop maturation was noted during harvest. Based on pod mesocarp color, across much of the region peanuts reached optimum maturity approximately one week later than peanuts in 2021. The delay was due in part to dry conditions earlier in the season that slowed the pace of development of peanuts. In some areas dry weather persisted from August until Hurricane Ian reached the Virginia-Carolina region. While yield in some of these areas was reduced substantially compared with previous years or compared to peanuts in other regions during 2022, yield was surprisingly good based on above-ground symptoms of drought stress.

During the third week of September, cooler temperatures occurred across much of the Virginia-Carolina region, most notably in central and northeastern North Carolina and Virginia. Temperatures were below 50 F for several nights in a row, and these cooler temperatures prevented further maturation of peanuts. A frost occurred in early October across much of the region. This created challenges for growers who had not dug pods and inverted vines. Wet soils after Hurricane Ian and potential for frost were difficult to navigate as growers worked toward harvesting the peanut crop. However, in most cases weather shifted to dry conditions with moderate temperatures that have allowed growers to all but complete harvest by November 10. Cold weather (below freezing) is predicted for the week of November 14. Rain from Tropical Storm Nicole could limit digging of remaining peanuts and create challenges moving toward the middle and latter part of November for final field operations.

Pest control was generally effective across much of the region in 2022. Dry weather limited activation of soil-applied herbicides applied at planting, but in general growers were able to maintain fields relatively weed-free for much of the season. Growers have adopted effective weed management strategies to minimize the impact of herbicide-resistant weeds. Thrips control early in the season was generally adequate. This insect

is found in the terminals of plants, and through feeding they limit early season growth and transmit tomato spotted wilt virus if left uncontrolled. Fortunately, growers were able to use a combination of systemic insecticides applied in the seed furrow at planting and foliar insecticides to adequately suppress this pest. Across much of the region, late-season foliar-feeding insects (fall armyworm, tobacco budworm, corn earworm, and beet armyworm) were sporadic and not yield limiting.

Southern corn rootworm damage has been relatively low across the region. Concerns over growing peanuts without chlorpyrifos, the only insecticide that controls this pest, were present moving into the 2022 growing season. Food tolerances were removed for this product which made use in peanuts illegal for the 2022 peanut crop. Although relatively dry weather contributed to lower levels of damage in 2022, moving forward damage from this insect is likely to be sporadic and not widespread. However, burrower bug damage was observed in several areas across the region. Damage from this insect has not been common in the past. A combination of dry weather and lack of use of chlorpyrifos created greater potential for kernel damage. Based on the damage seen in 2022, there is the potential for this pest to become more prominent if alternatives to chlorpyrifos are not identified and registered for use.

Spider mites were an issue in some of the dry areas across the region, especially in pockets of Virginia and North Carolina. This pest is difficult to control but growers were able to minimize damage in many cases. Cooler weather in late September coupled with Hurricane Ian minimized the impact of spider mites later in the season. As mentioned, there is concern about southern corn rootworm causing damage in absence of chlorpyrifos. However, this insecticide can induce spider mite outbreaks when used under hot and dry conditions. While conditions were very favorable for spider mite outbreaks in many areas, predicted outbreaks of this pest did not materialize in many cases, especially during the middle of the season. It is likely that in many of these scenarios (hot and dry conditions favorable for spider mites,) inability of growers to legally apply chlorpyrifos prevented major outbreaks of spider mites. A relatively high percentage of growers in the region have historically applied chlorpyrifos, and in some cases this approach has induced spider mite outbreaks.

Disease incidence was generally lower for the peanut crop in 2022 compared with disease in 2021. While on the surface this seems positive, limited disease in some areas reflected dry conditions that negatively affected yield. Growers were able to establish and maintain leaf spot and stem rot spray programs across the region, and dryer conditions minimized incidence of disease even when sprays were delayed. Incidence of tomato spotted wilt virus was generally greater in the lower Virginia-Carolina region but not excessive. Higher levels of tomato spotted wilt are generally associated with inadequate and non-uniform stands. Fortunately, growers achieved adequate stands across most of the region to minimize disease from this virus. The varieties currently grown in the region offer relatively good resistance to this disease.

Much like peanut yield, quality has been erratic across the region. This is due in part to dry weather in some areas that prevented complete formation of kernels, limited uptake of calcium by pods and kernels, and cooler weather in late September that limited further pod maturation. The dry weather also created scenarios where peanuts were graded as Seg 2 (damaged kernels) or Seg 3 (aflatoxin contaminated). Frost in early October caused freeze damage for some loads. Final estimates of the percentage of both quality parameters are currently not available. While there were challenges for individuals that had either Seg 2 or Seg 3 loads, in general presence of lower grades was not catastrophic for the Virginia-Carolina production region. However, a high percentage of the peanuts grown in the Virginia-Carolina region enter the in-shell trade. Following Hurricane Ian, a significant portion of peanut pods has been discolored. This creates challenges for supplying demand for the in-shell market. The discoloration is caused by a fungus (not *Aspergillus flavus*) but is not yield limiting. However, these pods are visually unappealing to the consumer.

Estimates of plantings for North Carolina, South Carolina, and Virginia are 44,530 ha (110,000 acres), 10,526 ha (26,000 acres), and 31,174 ha (77,000 acres), respectively. Final yield potential is 4,370 kg per ha (3,900 pounds per acre) across the region.

Discolored peanut pods that have been common for peanuts harvested after Hurricane Ian.



Pod shed from peanuts dug in late October due to delays in digging after optimum maturity was reached earlier in the fall.



Field with a small-grain crop planted after peanut harvest near Oak City, North Carolina.



Bales of peanut hay in a field near Oak City, North Carolina.



Peanut field after harvest near Edenton, North Carolina.

