

## **AT-PLANT PREEMERGENCE HERBICIDE CONSIDERATIONS IN PEANUTS -**

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With the arrival of much needed rain in our state and peanut planting winding up to full speed this week, selection of an-plant soil residual herbicide(s) is foremost on most grower's minds. Our recommendations for overlapping soil residual herbicides start at planting. This is critical because soil residual herbicides lower the number of weeds emerging in future flushes when the subsequent postemergence (POST) herbicides are applied. Weeds like Palmer amaranth, sicklepod, and morningglory continue to be problems in peanut fields in South Carolina. Here are some pointers and things to remember when planning your soil residual program after peanut planting.

In peanuts, we have several options for preemergence (PRE's) herbicides including Valor (comes in either SX or EZ formulations), Warrant, Outlook, Sonalan, Prowl, Dual Magnum, Anthem Flex, and Strongarm. Warrant, Outlook, Dual Magnum, and Strongarm are also labeled for application after peanuts emerge. Valor is our most effective soil applied herbicide for control of herbicide-resistant Palmer amaranth. Valor should be applied immediately after planting but within 2 days of planting. If 2 days have passed, then do not apply Valor SX if soil above the seed has cracked and herbicide spray will contact the seed. Also, seedling damage can occur if peanut emerges through Valor treated soil and intense rainfall event splashes treated soil onto the new foliage of the emerging peanut plant.

Tank mixing preemergence herbicides increases the spectrum of weeds controlled. Combinations of Prowl plus Valor, Strongarm plus Valor, or Sonalan plus Valor are typical broad-spectrum combinations for weed control weeds in peanut. Strongarm is recommended if morningglory is a significant problem. Also, Prowl is effective on large-seeded grasses, such as Texas panicum. Prowl or Sonalan can be tank mixed with Valor and Strongarm. Prowl and Sonalan are a different mode-of-action from Dual Magnum, Warrant, and other Group 15's. Consider this for resistance management. Sonalan must incorporated with water after application.

Final considerations for PRE's in peanut: Be sure to clean out the spray tank/boom assembly containing Valor shortly after finishing spray for the day. The amount of water required for a PRE herbicide activation varies, with some requiring more than others. For example, Dual Magnum requires less water than Prowl for activation. If dry conditions prevail after PRE application, then plan on using a residual, such as Dual Magnum, Outlook, Zidua, Anthem Flex, Strongarm, or Pursuit during the at-crack paraquat early POST (around 14 d after planting) application. Again, it is important to maintain overlapping residuals during the season to take the pressure off the POST herbicides.