

ENTOMOLOGY

INTERACTION BETWEEN HERBICIDE INJURY AND THRIPS MANAGEMENT IN PEANUT

Joel Moor, Jeff Gore, Jason Sarver, and Don Cook

"THRIPS MANAGEMENT IN PEANUT IS VERY IMPORTANT WHEN SOME OTHER STRESS SUCH AS HERBICIDE INJURY, EXCESSIVE DROUGHT, OR SATURATED SOILS OCCURS."

Jeff Gore

The area planted to peanut has been increasing in Mississippi over the past several years due to lower commodity prices in other crops. Peanuts have become a viable option for crop rotation on both irrigated and non-irrigated lighter textured soils. Insect pest management is complex and numerous species typically feed on peanut. In general, at-planting insecticides are recommended to manage soil insects and thrips.

Historical research has shown that foliar control of thrips provides little benefit in peanut. However, some pre-emerge herbicides can cause significant injury under certain environmental conditions and it is not clear how thrips impact seedling peanuts following herbicide injury. The objective of this study was to evaluate the interactions



No Valor
34.08% canopy cover



Valor
9.43% canopy cover

between applications of Orthene and commonly used pre-emerge herbicides to determine their impact on final peanut yields. The picture below, taken with the Canopio Application, shows the impact of a simulated splashing rain where Valor plus Dual Magnum was applied (right) compared to where only Dual Magnum was applied (left). Where significant injury from Valor was observed, overall plant growth and yield of peanut

was improved by foliar applications of acephate to manage thrips. Little benefit has been observed from the use of foliar insecticides to manage thrips in peanut under optimum growing conditions. In general, managing thrips in peanut is recommended when some other stress is affecting normal growth and development.