

THRIPS MANAGEMENT IN THE LOWER SOUTHEAST**P. Roberts****M. Toews****J. All****University of Georgia****Tifton, GA****J. Greene****Clemson University****Blackville, SC****F. Reay-Jones****Clemson University****Florence, SC****T. Reed****R. Smith****B. Freeman****Auburn University****Auburn, AL****Abstract**

Thrips are a predictable insect pest of seedling cotton in the lower southeast. Thrips will infest seedlings at emergence and may potentially cause economic damage until seedlings reach the 4-leaf stage and are growing vigorously. Plant damage includes leaf distortion, reduced plant growth, delays in maturity, and in severe cases loss of apical dominance or stand loss. Control during early seedling stages is critical. Most cotton in the lower southeast receives an at-plant systemic insecticide for control of thrips. Preventive systemic insecticides such as aldicarb applied in-furrow or a neonic seed treatment provide thrips control upon emergence and deliver a consistent yield response. Aldicarb is more efficacious on thrips and provides longer residual control when compared with neonic seed treatments. Extended residual control can be important when seedling growth is slowed due to cool temperatures or other plant stresses. Slow seedling growth also results in increased injury symptoms associated with thrips feeding; a rapidly growing seedling can much better tolerate thrips feeding. Planting date and tillage practice influence thrips infestations. Thrips infestations tend to be higher on early planted cotton compared with later planting dates and in conventional tillage systems compared with reduced tillage systems. Foliar thrips insecticide applications are sometimes needed to supplement at-plant treatments. Thresholds are typically based on the number of thrips per plant or plant damage ratings. When examining plants for injury, newly expanding leaves should be examined carefully since thrips feed on and damage unfurled leaves in the terminal bud. The presence of immature thrips (crème colored and wingless) is an important observation when making decisions about foliar applications. The presence of immature thrips suggests that the at-plant insecticide is no longer active. Growers should consider the risk of thrips infestations when making management decisions. In field trials conducted in Georgia, a supplemental foliar insecticide significantly improved yields in high thrips risk environments (early planted and conventional tillage) but did not significantly improve yields in low thrips risk environments (late planted and/or reduced tillage). In summary, at-plant treatments have proven to be a good investment. In addition to providing thrips control, many of these treatments also provide early season aphid control. Understanding how planting date, tillage, and early season seedling vigor affect thrips infestations and associated injury will allow for better decisions to be made relative to at-plant insecticide selection and foliar applications. Fields should be scouted on a regular basis and needed foliar sprays should be made in a timely manner.