MANAGING SECONDARY PESTS D. Robinson, M. Sullivan, S. Turnipseed and T. Walker Clemson University, Edisto Research and Education Center Blackville, SC

Abstract

Secondary pests of primary concern in South Carolina include early season thrips, beet armyworm- Spodoptera exigua (Hubner), fall armyworm- Spodoptera frugiperda, and stink bugs. Others occasionally encountered include aphids, plant bugs, and soybean loopers- Pseudoplusia includens(Walker). More than 95% of cotton acreage is treated with an at-planting, in-furrow application of aldicarb for early season thrips. If necessary, foliar sprays of acephate, dicrotophos, or dimethoate are utilized as additional treatment regimes. Fall armyworm was the predominant armyworm pest in 1997. Results indicated that spinosad and thiodicarb were most effective with two applications necessary to control an established population. Pyrethroids applied for cotton bollworm provide adequate control of armyworms when sprayed over egg masses and newly hatched larvae. Stink bug control is acheived in conventional cotton by multiple pyrethroid applications for bollworm. Transgenic cottons are of particular concern when no bollworm applications are being made after fruiting is initiated. Stink bugs occurring in transgenic cotton can be controlled with pyrethroids in July and early-mid August. In both conventional and transgenic cotton, late season (late August-September) infestations in the absence of bollworm can be controlled with methyl parathion and dicrotophos. We do not recommend spray applications for aphids and plant bugs in June because these insects do not cause economic losses and applications for their control disrupt beneficials.