

Performance of Insecticides Co-Applied In-Furrow with Superabsorbent Polymer Compared to Industry Standards

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Management decisions mitigating thrips (*Frankliniella* spp.) injury and tomato spotted wilt infection (caused by *Tomato spotted wilt virus*) are primarily limited to being enacted at the beginning of the growing season. Previous work explored corresponding potential management contribution of concurrent insecticide application with a superabsorbent polymer in-furrow but reported effects to be marginal or variable across experiments. To more thoroughly probe this potential, data from a collection of 40 experiments conducted from 2009 through 2021 was analyzed to examine the efficacy of insecticides (aldicarb, imidacloprid, imidacloprid plus fluopyram, phorate, and a nontreated check) applied in-furrow at planting for peanut production. In addition to treatments applied individually, experiments included imidacloprid (n = 11) or phorate (n = 18) applied in the presence of 2 lb/A superabsorbent polymer. Results indicated that neither imidacloprid nor phorate alone significantly varied with regard to stand count ($P > 0.13$), thrips injury ($P > 0.24$), tomato spotted wilt incidence ($P > 0.12$), or yield ($P > 0.36$) when compared to their co-application with the polymer. These results were consistent across variety susceptibility levels to tomato spotted wilt. Treatment profitability will also be discussed.