Evaluation of Insecticide Seed Treatments for Management of Thrips and Tomato Spotted Wilt Virus in Peanuts.

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Research in Virginia and North Carolina has found that insecticide seed treatments can provide good levels of thrips control in peanut and result in high yields. In Virginia, selected at-plant products were evaluated for efficacy against thrips from 2009-2011. Seed treatments included thiamethoxam (Cruiser 70WS and Cruiser 5FS, Syngenta Crop Protection), experimental compounds (A17460, A17461, A17462, Syngenta Crop Protection), and fungicide-only (Dynasty PD, Syngenta Crop Protection) treatments. For comparison, an untreated check and two granular in-furrow insecticides were included: phorate (Thimet 20G, AMVAC Chemical Corporation) and aldicarb (Temik 15G, Bayer CropScience). ‘NC-V 11’ peanut were planted in early May on 36” row centers. Data included stand counts, visual thrips injury ratings on a scale of 0=no injury and 10=dead plants, thrips per 10 terminal leaflets, number of tomato spotted wilt hits per plot, and yield. In general, Cruiser and experimental seed treatments kept thrips injury levels low, but for a shorter time compared with Temik and Thimet. Also, insecticides treatments typically had similar adult and immature thrips populations. Tomato spotted wilt pressure ranged from relatively light in 2009 to moderately heavy in 2011, with fair control gained by most insecticide treatments. In 2009, Cruiser 70WS and A17460 yields were statistically similar to Temik and Thimet, the highest-yielding treatments; all insecticide treatments had similar yields in 2010; and while there were no significant differences in 2011, the experimental seed treatment A17461 had the highest yield. Similar studies were conducted in North Carolina in 2010 and 2011, with results that support the data from Virginia.