Thrips and Peanut Response to Imidacloprid and Fluopyram Applied At Planting

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Tobacco thrips (*Frankliniella fusca* Hinds) can reduce peanut (*Arachis hypogaea* L.) yield if not controlled in many instances in North Carolina and Virginia. Systemic insecticides are often applied in the seed furrow at planting to suppress tobacco thrips and protect peanut yield. Foliar sprays of acephate are often made regardless of the insecticide applied at planting. Imidacloprid plus fluopyram is registered for use in peanut but information in the peer-reviewed literature is limited relative to effectiveness in suppressing tobacco thrips and whether or not a foliar application of acephate is needed when this product is used. Peanut injury caused by tobacco thrips was lower when phorate or imidacloprid were applied alone compared with imidacloprid plus fluopyram in 16 trials conducted in North Carolina and Virginia from 2014 through 2020. However, all insecticides applied at planting protected peanut from injury caused by tobacco thrips well enough to prevent yield loss compared with non-treated peanut. While acephate decreased visible injury caused by tobacco thrips, yield was not affected by acephate regardless of the systemic insecticide applied at planting. Results from these trials indicate that that imidacloprid plus fluopyram offers adequate suppression of tobacco thrips to protect yield. Although acephate suppressed tobacco thrips, yield was not affected by acephate.