Influence of Planting Date on Peanut Response to Selected Pest Management Practices

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Planting date can affect pest reaction and yield of peanut. Research with the new Virginia market type cultivar Bailey is limited with respect the interaction of planting date with thrips management practices, seedling disease, and injury from soil-applied herbicides. Research was conducted in North Carolina during 2013 to address these treatment factors when Bailey was planted May 4, 16, or 28. In one experiment, treatment combinations included 2 levels of phorate (0 vs. 5.0 lbs product/acre), 2 levels of acephate applied postemergence (0 vs. 10 oz product/acre), and 2 digging dates (digging at optimum maturity vs. delaying digging 1 week past optimum maturity). In a second experiment, treatments consisted of 2 levels of phorate (0 vs. 5.0 lbs/ace) and 2 levels of seed treatment (no commercial fungicide seed treatment vs. commercial seed treatment). In a final experiment, treatments consisted of phorate treatments described previously and 4 levels of herbicide (Valor SX at 3 and 6 oz product/acre and Fierce at 3 and 6 oz product/acre). The combination of phorate and acephate controlled thrips more effectively and increased yield more than either insecticide alone irrespective of planting date. Peanut stand and yield were higher when seed was treated with commercial fungicide regardless of planting date, and less thrips damage was noted when peanut received a fungicide seed treatment compared with other seed treatment/phorate combinations. Visible Injury and peanut yield from Valor SX and Fierce was not affected by phorate treatment but was affected by planting date. Herbicide injury reflected timing of rainfall after planting relative to peanut emergence more than temperature associated with planting date. Peanut response to Valor SX and Fierce was similar.