Biology and Management of the Rootworm Complex in Georgia Peanut

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The southern corn rootworm, *Diabrotica undecimpunctata*, is native to the US where it is a serious pest of peanut. The banded cucumber beetle, *D. balteata*, is native to the tropics, but its range has expanded to include most of the US peanut production area. The purpose of this study was to define seasonal variation in adult rootworm populations in commercial peanut fields and to determine the effect of proximity to a putative early season host on infestations in peanut. The effect of soil type, irrigation and insecticide use on rootworm abundance and incidence of pod injury was also evaluated. In 2020, sweep nets and yellow sticky traps baited with a plant volatile lure were used to sample rootworm populations in eleven peanut fields from July-September; baited sticky traps were used to monitor rootworm adults in 32 peanut fields in 2022. *Diabrotica balteata* was significantly more abundant than *D. undecimpunctata* across all fields in both years. No clear effects of soil type, irrigation or insecticide use could be discerned in 2021. The results of small-plot field research and laboratory bioassays designed to evaluate the efficacy chlorpyrifos alternatives were largely inconsistent. Growers with fields at high risk for rootworm injury face a serious challenge in the coming years if no consistently effective management option can be identified. Chemigation offers some promise for rootworm management, but currently available insecticides have not provided adequate reduction in injury.