

Final Summary

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Evaluating Chlorpyrifos Failures in NC Peanut Fields and Seeking Cost Effective Alternatives

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This project investigated the frequency of chlorpyrifos failures and looked and control alternatives for southern corn rootworm management in North Carolina peanut fields. The findings reveal three important aspects of rootworm management in peanuts. First, the incidence of chlorpyrifos failures is very low and limited to specific locations and is limited to specific fields in a few counties. Second, the use of higher rates of chlorpyrifos or multiple applications provide no benefits. In addition, investigations of alternative products demonstrate some potential if growers seek to continue growing peanuts in those fields.

As we move forward it is important for growers to make individual decisions on the rotation of peanuts into fields with a history of poor performance of chlorpyrifos. The use of alternatives such as Thimet (phorate) in these fields can be considered. Our research on alternatives for chlorpyrifos does indicate potential for other non-labeled products, but there is limited interest from agrichemical companies to pursue additional labels for such a limited acreage use. Increased rates of chlorpyrifos were found to provide no benefit.

Impact Statement

The findings of this research have helped peanut farmers in North Carolina avoid unnecessary insecticide use and expense. The product chlorpyrifos has failed in specific fields when applied for corn rootworm control in peanuts. The manufacturer petitioned the EPA and changed the label allowing for more applications and the use of higher rates. Our research documented that the higher rates and multiple applications provides NO benefit and in some cases, actually made some rootworm infestations more severe. In addition, our research has initiated the process of developing other products for rootworm management.