

## Improving and Reducing Cost of Control for Caterpillar Pests in Soybean

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As a group, caterpillar pests are by far the most damaging insect pests to N.C. soybean. For example, while many growers claim not to have problems with insect pests, most end up spraying for them. In 2014, caterpillar pest numbers were about average, and caused an estimated **\$43.7 million dollar loss and cost of control in N.C. soybeans**. Management of these pests is threatened due to increasing insecticide resistance. One way to reduce these losses is to identify where pests are present, minimize unnecessary sprays where they are not and identify where expensive caterpillar insecticides are needed and where they are not.

The NCSPA checkoff funded a project to better understand the nature of resistance for corn earworm and soybean looper. Results indicate that soybean loopers are highly resistant to pyrethroids, like bifenthrin (Brigade), in N.C. As a result, pyrethroids can flare looper populations even when tank mixed with chlorantraniliprole (Prevathon), a caterpillar-specific insecticide. As this research continues, it will help growers select the most effective and inexpensive insecticide for both corn earworm and loopers in future seasons.

