

Bermudagrass Stem Maggot

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The bermudagrass stem maggot (*Atherigona reversura*) is becoming a troublesome insect in bermudagrass pastures and hayfields across the state. This insect was first noticed in Georgia in 2010, although it is native to south Asia. The damage from this insect occurs at the last node of the stem, where the leaf emerges. The larva or maggot (immature stage of the fly) burrows into the shoot and feeds. This causes the leaves above the feeding area to die. The discoloration of the upper leaves cause the field to look like there has been a light frost. If left uncontrolled, up to 80 percent of the tillers in the field can be affected, resulting in significant yield reduction.

Insect life cycle – The fly lays an egg on the bermudagrass leaf and the larva emerges approximately 2-3 days later. The larva bores into the upper portion of the tiller, feeding on the sap from the stem. Chlorosis (leaf yellowing) will be seen 1-3 days later. The mature larva will exit the stem and pupate in the soil for 7-10 days, after which the fly will emerge. Work done by Drs. Will Hudson and Dennis Hancock at the University of Georgia has shown the flies can live for approximately 18-20 days. There may be multiple overlapping generations of Bermudagrass stem maggot during the season.

It is currently believed that this insect overwinters in the Gulf States and migrates into our area during the summer. Infestations of the bermudagrass stem maggot typically get progressively worse as the season progresses.

Control strategies – Bermudagrass fields should be inspected routinely for damage during the summer. When approximately 10-20 percent of the plants show damage, a producer should plan on trying to control the insect. Infested fields should be harvested if they are within seven days of the normal harvest stage. Heavily infested fields should be harvested earlier, and any baled grass should be removed. Current recommendations are to treat infested, recently harvested fields with a foliar-applied insecticide within 7-10 days after the previous harvest. Properly timing this application is critical for successful suppression. A second application 7-10 days later may be justified where moderate or severe infestations are present.

If harvest is not an option, then two insecticide applications made 10 days apart will break the life cycle of the insect and minimize the damage. Table 1 includes a list of recommended insecticides. Please refer to UT Extension publication [PB1768](#), Insect Control Recommendations for Field Crops, for all recommended crop insecticides. Be sure to read and follow all instructions on the insecticide label.