NFREC Update

Bermudagrass Stem Maggot – A New Pest in North Florida

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A **B** **C**

Photos of field symptoms (A and B) where top leaves of bermudagrass are affected by maggot feeding and the Bermudagrass Stem Maggot (C).

Florida cattle producers may need to more close examine any bermudagrass pastures or hayfields for a new exotic insect pest, the Bermudagrass Stem Maggot. Counties in south Georgia reported the stem maggot in July, 2010 and have experienced a resurgence of the fly causing dieback on bermudagrass hay fields this year. We have been monitoring the insect pest moving into Florida since last year, however it was not confirmed in pastures until this fall when maggots were found feeding on bermudagrass in suspect hay fields in north Florida.

This new exotic invasive fly, *Atherigona reversura*, was first discovered damaging bermudagrass pasture and hay fields in Georgia. The identification of the fly was the first record of this species in North America and it has the potential to become a serious pest of bermudagrass forage and turf.

Four north Florida counties, including Madison, Alachua, Gadsden and Bradford, have fields of bermudagrass that have the stem maggot infesting tops of the plants. Suspect fields have also been identified in central and south. Insect specimens collected so far have been confirmed to genus (*Atherigona* spp.) by the Florida Division of Plant Industry and adult flies have been submitted to specialists to verify species (*A. reversura*).

Symptoms of the bermudagrass stem maggot include the death of top leaves to the node or growing point. These leaves easily can be pulled out and often feeding by the stem maggot can be seen with the naked eye. Control for this pest currently is a short-term pyrethroid application or immediate hay cutting. Should you suspect the stem maggot is present in your bermudagrass pastures or hay fields, please contact your local county extension agent, or extension forage specialists Ann Blount (paspalum@ufl.edu) or Joao Vendramini (jv@ufl.edu) so that we can confirm counties with bermudagrass fields that may be affected.

The reality of the permanent presence of this insect pest to bermudagrass may cause us to increase pyrethroid applications to hay fields or cut and harvest bermudagrass when fly populations are high. Because this is a new pest to the U.S., we have no threshold tolerance levels established or legal known insecticides that would supply longer-term protection from damaging maggots. The University of Georgia's entomologist, Will Hudson, USDA-ARS bermudagrass breeder, Bill Anderson, and forage extension specialist, Dennis Hancock will be working with several Florida agents and forage specialists to test registered insecticides that might provide long-term protection from fly infestations. Unfortunately all bermudagrass varieties tested so far have been susceptible to maggot feeding. Again, short-term control includes grazing affected fields, timely hay harvest or pyrethroid applications.