Susceptibility of Pasture Grasses to Insect Pests In South Florida

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Since 1996, about 300,000 acres of bahiagrass pastures have been destroyed by mole crickets in south-central Florida. The value of hay lost through the damage is estimated at $6 million annually. There have also been numerous outbreaks of insect pests on other warm season grasses. The South Florida Beef/Forage Extension Group have set up a trapping system to monitor long-term mole cricket numbers on established grasses in several counties. Meanwhile, we have also kept records of reported incidence of pasture insect pests and, in most cases, followed up with visits to ranches to confirm diagnosis.

Our preliminary findings are as follows: Of the 97 reported insect infestations on ranches in the past 2 years 66 cases were related to confirmed bahiagrass damage by mole crickets 3 cases involved grubs injury to bahiagrass; 19 cases involved a combination of mole crickets and spittlebugs or chinch bugs destruction of Floralta limpograss; 5 cases related to armyworm outbreak on stargrass and bermudagrass; and 3 cases were due to other abnormalities on bahiagrass (armyworm, sludge effluent).

Our preliminary conclusions are as follows: Bahiagrass is the most susceptible grass to mole crickets in south Florida. The decline is characterized by initial yellowing of grass followed by death or brown patches in pasture. The ground in dead spots feel mushy to walk on because of tunnels from burrowing which loosens the soil and disturb grass roots. Prozap bait is the only remedy currently available and may provide temporary relief in hot spots if properly applied in September. The mole cricket nematode will provide long-term control when it comes back on the market later this year.
Floralta limpograss is susceptible to a variety of insect pests including mole crickets, spittlebugs and chinch bugs. The combination of mole crickets and spittlebugs cause Floralta to die back in large patches. Presence of froth (spittle-like material) is identifiable characteristic of spittlebug. Burning of the dense Floralta mat in January or February may provide some control. Alternatively, mowing or grazing may be used to keep down dense mat formation in summer to help reduce spittlebug problem. Chinch bugs outbreak on Floralta in dry years cause a mixture of yellowing or dying spots and dead plants throughout the year. It may be controlled with the application of 1 quart of Sevin XL per acre. The field should be clean-mowed 2 weeks after spraying and then fertilized with a complete fertilizer.

Armyworms appear to be a major problem on stargrasses and bermudagrasses. Widespread stripping of leave blades from their veins occur as the worms consume forage and cause extensive damage. Spraying with 1 quart of Sevin XL per acre provides effective control only if applied to the hair like stage of armyworm development.

To help continue with the monitor of pest incidence on pasture grasses in south Florida, producers are encouraged to call in to their County Extension Office or to the Range Cattle REC with their observations and comments of pest outbreaks on their ranch. This information is very valuable in keeping us aware of the severity of insect problems and give direction to our extension and research programs.