Mole Cricket Control on Bahiagrass Pasture

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Bahiagrass is by far the most dependable forage for pastures in Florida and was considered to be almost indestructible. That is, until the mole cricket showed up on the scene. In the past 20 years mole crickets have destroyed thousands of acres of bahiagrass pasture throughout Florida.

At first the area most affected in South Florida was from Pasco County south into Hillsborough, Manatee, and Sarasota Counties. Also, areas in Orange and Osceola Counties were heavily infested with mole crickets. Today, mole crickets are found in large numbers in various spots throughout Florida.

In the late 1970's and early 1980's UF/IFAS research and extension faculty began to study methods of controlling mole crickets. Some chemical treatments were effective, but for a short while. Only biological control methods appeared to offer any hope for long-term control and the most promising organism was a nematode from South America which specifically infected and killed mole crickets.

This nematode was produced commercially in Florida and marketed to golf courses in the late 1980's. The nematode was not marketed to ranches because of the high cost required to purchase and apply nematodes over the entire pasture area ($400/acre). Subsequently, commercial production of mole cricket nematodes was discontinued.

In the mid 1990's a group of UF/IFAS faculty met and discussed the ever increasing problem with mole crickets destroying Florida's bahiagrass pasture. Following that meeting Dr. Martin Adjei, a newly hired extension agronomist
at Ona, chose to provide leadership for a second attempt to study methods of controlling mole crickets in south Florida and applying these methods in the real world.

Over the past six years Dr. Adjei has done a tremendous job of evaluating mole cricket populations and treatments that might control them. Dr. Adjei determined that the most effective treatment for long-term control of mole crickets again pointed to nematodes. Also, results suggested that effective and cost efficient control can be obtained by applying the nematodes in strips rather than inoculating the entire bahiagrass pasture. This method of application greatly reduces cost.

This year, Dr. Adjei found that nematodes applied to mole cricket infested pastures last fall infected mole crickets at 15 of 17 ranch sites. Dr. Adjei is convinced that if nematodes are applied at the correct time in the fall and spring, and when moisture conditions are adequate, the nematodes will spread slowly and control the resident mole cricket population for a long time.

Fortunately, a commercial supply of the mole cricket insecticidal nematode named Nematac S is now available. Purchase information can be obtained from Becker Underwood at 1-800-232-5907, or their local representative at (941) 350-7291. Information on nematode application can be obtained from Dr. Adjei at the Range Cattle REC at (863) 735-1314.

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