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. 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 UF/IFAS research and extension faculty studied methods to control mole crickets. Chemical treatments were effective, but for a short while. Only biological control methods offered hope for long-term control. The most promising organism was a nematode from South America which specifically infects and kills 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. Dr. Martin Adjei, a newly hired extension agronomist at Ona, chose to provide leadership for a second attempt to control mole crickets in 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 control them. Dr. Adjei determined that
the only effective treatment for long-term control of mole crickets was nematodes. Also, results suggested that effective and cost efficient control was obtained by applying the nematodes in strips (one eighth of pasture area) rather than inoculating the entire bahiagrass pasture.

Over the past two years Dr. Adjei has applied nematodes to mole cricket infested pastures at over 20 ranch sites. Dr. Adjei has shown that nematodes applied in strips at the correct time in the fall and spring, and when moisture conditions are adequate, the nematodes will spread slowly across the entire pasture and control the resident mole cricket population for a long time.

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.

Ingram Grove Service, Inc. at Winter Haven will apply the nematodes commercially. Call (863) 422-4918 (office) or (863) 287-3438. Cost is $25 per acre for the nematode and from $7 to $15 per acre for the application on sizeable acreage.

Information on nematode application can also be obtained from Dr. Adjei at the Range Cattle REC at Ona (863) 735-1314.

Now is the time to apply nematode to infect mole crickets. We have a tool to do the job at a reasonable cost. Lets apply this new technology and put mole crickets in their place like we did screw worms.

For questions or comments regarding this publication contact Findlay Pate