Season Long Control of Mole Crickets on Hybrid Bermudagrass Golf Course Fairways. (C05-unruh104919-Oral)

Authors:

- S.D.Davis* - *Bayer Environmental Science, Gulf Breeze, FL*
- J.B.Unruh - *University of Florida, Milton, FL*

Abstract:

Experiments were conducted on a golf course at Tyndall AFB, FL previously identified as one with a history of poor mole cricket control. Treatments including fipronil 0.1G (14 and 28 kg/ha) (surface and subsurface application) and 0.0143G (97 kg/ha), bifenthrin 0.2G (224 kg/ha), deltamethrin 0.1G (134 kg/ha), and imidacloprid 0.5G (90 kg/ha) were applied to plots on bermudagrass fairways. Impact of post-application irrigation and pre-application aeration on fipronil efficacy was also evaluated. Individual mole cricket mound counts were taken in each plot until injury was so severe (>70%) that assessments of percent damaged plot area were recorded. Conventional slit-applied fipronil 0.1G failed to provide mole cricket control at either rate. Broadcast application of fipronil 0.1G provided acceptable control. Post-application of water reduced fipronil 0.1G activity but had no effect on fipronil 0.0143G formulation. Aeration had no impact on fipronil efficacy. Bifenthrin provided acceptable control (>90%) for 15 weeks after application (WAA), while deltamethrin efficacy peaked at 11 WAA providing 88% control. Imidacloprid failed to provide acceptable control (<75%) throughout the duration of the study.

Corresponding Author Information:

Bryan Unruh
University of Florida
5988 Hwy. 90 W., Bldg. 4900
Milton, FL 32583
USA

phone: 850-983-2632 ext. 114
fax: 850-983-2637
e-mail: jbu@ufl.edu

Presentation Information:

Presentation Date: Tuesday, November 12, 2002
Presentation Time: 3:15 pm

Keywords:
Insects, Mole Crickets, Golf Course fairways