EFFICACY OF ENDIGO ZC FOR CONTROL OF PLANT BUGS IN ARKANSAS, 2007

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Introduction

Endigo is a new, enhanced product with two modes of action including lambda-cyhalothrin (a synthetic pyrethroid) and thiamethoxam (a neonicotinoid). Endigo offers effective knockdown and residual control of several economically damaging cotton pests such as cotton fleahoppers, tarnished plant bugs, bollworms, budworms, and stink bugs. Endigo is targeted for mid- to late-season insect pest control and gives us another tool to reduce insecticide resistance issues and offers a wide spectrum of activity of cotton insect pests (Hollingsworth, et. al, 1995).

The purpose of these studies was to determine the efficacy of Endigo against other common used insecticides.

Materials and Methods

Test one was conducted on Sites Farms, Lonoke County, Arkansas. The variety of cotton was Stoneville 4427 B2RF. Data was collected on June 26 (4 DAT), June 29 (7 DAT), 2007. Test two was located at the Lonn Mann Cotton Research Station in Marianna, Arkansas. Insecticide treatments were applied on August 1, 2007. Data was collected on Aug 7 (6 DAT), Aug. 10 (9 DAT), and August 15 (14 DAT), 2007. Both trials were 4 rows by 50 ft. arranged in a randomized complete block design with four replications. Applications were made with a mud master spray tractor. The boom was fitted with TX6 hollow cone nozzles at 19in nozzle spacing. Spray volume was 10 gal/a, at 45 psi. Treatments are listed in the results section. Tarnished plant bug density was determined by counting adults and nymphs from two randomly selected locations in each plot using a drop cloth. Data were processed using Agriculture Research Manager Version 7. Analysis of variance was conducted and Duncan's New Multiple Range Test (P=0.10).

Results and Discussion

The results of test 1 (Fig. 1)indicated Endigo was comparable to all other treatments and had significantly fewer plant bugs than the untreated check (UTC).
In Test 2 (Fig. 2) at 6 DAT the untreated check had significantly more plant bugs than all treatments. Endigo had significantly lower plant bug numbers than the UTC, Carbine at 2.3 OZ/A, and BAS 320.

Acknowledgements

We would like to thank David Sites and the Lonn Mann Cotton Research Station for their cooperation in these studies. We also would like to acknowledge Chemtura, DuPont Ag, Syngenta Crop Protection, FMC, and AmVac for their support.

References

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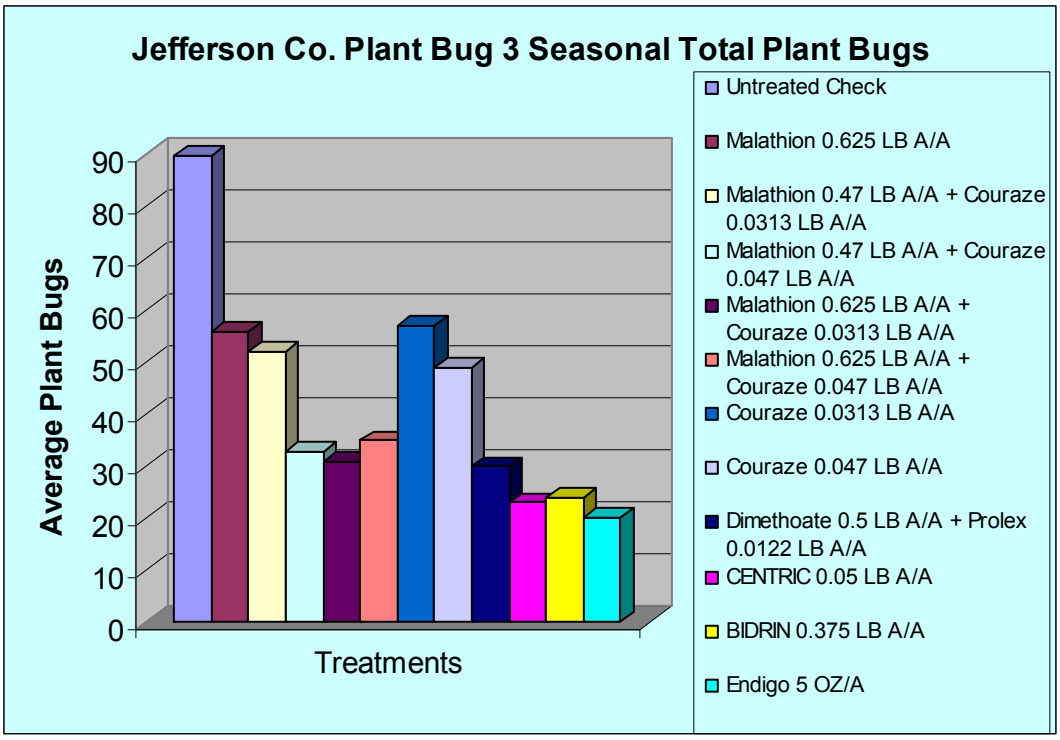

Fig. 1. Efficacy of Endigo compared to selected insecticides, Jefferson Co., 2007.

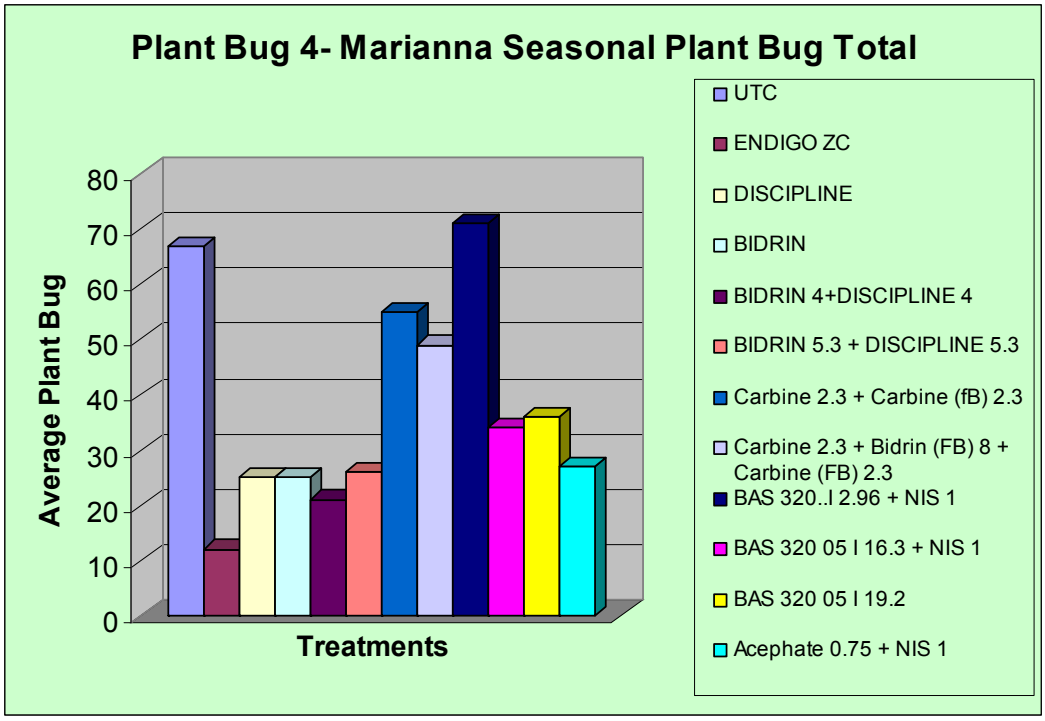

Fig. 2. Efficacy of Endigo compared to selected insecticides, Marianna, 2007.