

Discussion

This information on development rates will be useful in the event rearing of this parasite is needed to increase its numbers for release. During July and August 1984, 1725 parasite adults reared at Riverside, CA were released at the ASU Farm at Tempe. Unfortunately, the farm has since been abandoned so no recovery collections are possible to determine if the species has become established. It is also doubtful that this species can be separated from our native Eretmocerus.

According to some authorities, one of the reasons the sweet potato whitefly has recently become a serious pest is due to the harmful effect of insecticides on their parasites and the lack of the effect of materials on the whitefly. With extensive insecticide programs normally being applied for pink bollworm and boll weevil control, there appears to be little chance that a new whitefly parasite can become established in cotton.

**Early Insect Control in Cotton
Greenlee County**

Ray Tyler, Cooperator; Edith DeRosa, Ag Agent
Lee J. Clark, Research Specialist; Leon Moore, Entomology Specialist

Summary

Cotton was treated at the pinhead square stage with Orthene to prevent boll shed caused by thrips and Lygus. Yield results showed no statistically significant differences, even though yield trends indicated a decrease in the treated plots compared to the check. Severe pressure from Heliothus later in the season and the yield trends would indicate that the insecticide treatment effect on the beneficial insects was more important than its effect on thrips and Lygus.

Introduction

A great deal of interest has been generated in the farm press about the effectiveness of early insect control on hastening harvest and increasing yield. Therefore, a test was conducted in Greenlee county to see if these effects can be shown at an

elevation of 3500 feet, where the season is shorter and the insect pressure generally less than the principle cotton growing areas in the state.

Materials and Methods

Acala 1517-75 was planted on a Pima silty clay loam adjacent to the Gila River, approximately 10 miles north of Duncan. Eight row plots were used to accommodate the width of the farmers spray rig, which was used for the applications. A randomized complete block design with four replications was used. Orthene was applied at a rate of 8 ounces per acre on June 3, 11, and 19. On July 19 bolls were counted in 5 feet of row in each plot. On October 26, 4 rows of each plot was picked and weighed. These results are tabulated in Table 1.

Results

Table 1. Boll Counts and Yields as Effected by Early Insect Treatment.

TREATMENT	BOLL COUNT	YIELD
Orthene	33.3 a*	2667 a
Check	36.0 a	3021 a

* Values followed by the same letter are not significantly different at the .05 level by the Student-Newman-Keul's test.

References

- O'Brien, Kelly. "Why you can't afford to lose those early bolls." Farm Jour. Feb. 1985. p. 14
- Heinrichs, Tim. "Early season thrips. ." CA-AZ Farm Press. 30 Mar 1985. p.13