

**PERFORMANCE OF APPLAUD® (BUPROFEZIN)  
AGAINST SILVERLEAF WHITEFLY IN FIRST  
YEAR'S COMMERCIAL USE IN ARIZONA**

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**Abstract**

APPLAUD® 70WP, containing the active ingredient buprofezin, is an insect growth regulator which interferes with the production of chitin, thereby, interrupting the molting process. It is selective in its activity to Homopteran species such as whiteflies, leafhoppers, planthoppers and scale insects. Arizona received a Section 18 emergency use exemption for Applaud in 1996.

Demonstration trials, consisting of a program with or without the use of Applaud, were established in grower's fields of 30-40 acres in Casa Grande, Eloy and Buckeye, AZ. Whitefly population pressure started as light and became heavy at the Casa Grande and Eloy locations in mid-July and was heavy at the Buckeye location throughout the season. Ovasyn (amitraz) + Phaser (endosulfan) applications were made in June to early July preceding the Applaud application which was made in mid to late July. One application of Applaud (Section 18 specified only one application) was applied at 0.35 lb ai/A. The Applaud application provided 14-23 days effective commercial control before treatment was necessary. Ovasyn plus Phaser was used again at the end of the season. The program containing the Applaud was comparable or better than the alternate program established (where Applaud was not part of an overall program).

Applaud has proven to fit well into an overall Integrated Pest Management and Resistance Management Program for controlling whiteflies in Arizona.