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GAUCHO GRANDE SEED TREATMENT INSECTICIDE - A TWO YEAR REVIEW OF PERFORMANCE

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Abstract

GAUCHO (Imidacloprid) has been marketed as a seed treatment for cotton since 1996. GAUCHO is active against many early season insect pests that affect cotton. Its spectrum of insect activity includes *Frankliniella fusca* (tobacco thrips), S*ericothrips variabilis* (soybean thrips), *Thrips tabaci*(onion thrips), and *Aphis gossypii* (cotton aphids). Heavy thrips and aphid infestations can inhibit plant growth,which can lead to delayed crop maturity, and, in some cases, heavy thrips populations can damage growing terminals. Recent label changes now allow for the use of GAUCHO on cottonseed at a rate of 0.375 mg ai/seed or 8.0 oz ai/cwt. Results from university conducted seed treatment trials across the Mid-South and Southeastern United States demonstrate the added benefits of extended thrips and aphid protection with this new rate. GAUCHO at 0.375 mg ai/seed significantly reduced thrips damage and adult and immature thrips counts when compared tothe current standard rate of 4 oz ai/cwt.

Introduction

GAUCHO GRANDE is active against several early season sucking insect pests that affect cotton. Imidacloprid seed treatment registrations in the United States, include canola, sorghum, potatoes, and wheat. Imidacloprid applied to cottonseed is taken into the cotyledons and translocated into the plant through the root system. It's spectrum of insect activity includes *Frankliniella fusca* (tobacco thrips), S*ericothrips variabilis* (soybean thrips), *Frankliniella Occidentalis* (western flower thrips), and *Aphis gossypii* (cotton aphids). Heavy thrips and aphid infestations can inhibit plant growth, which can lead to delayed crop maturity; and in some cases, heavy thrips populations can damage growing terminals. GAUCHO GRANDE delivers exceptional protection against early season damage caused by aphids and thrips, including western flower thrips, along with early season activity against plants bugs.

Materials and Methods

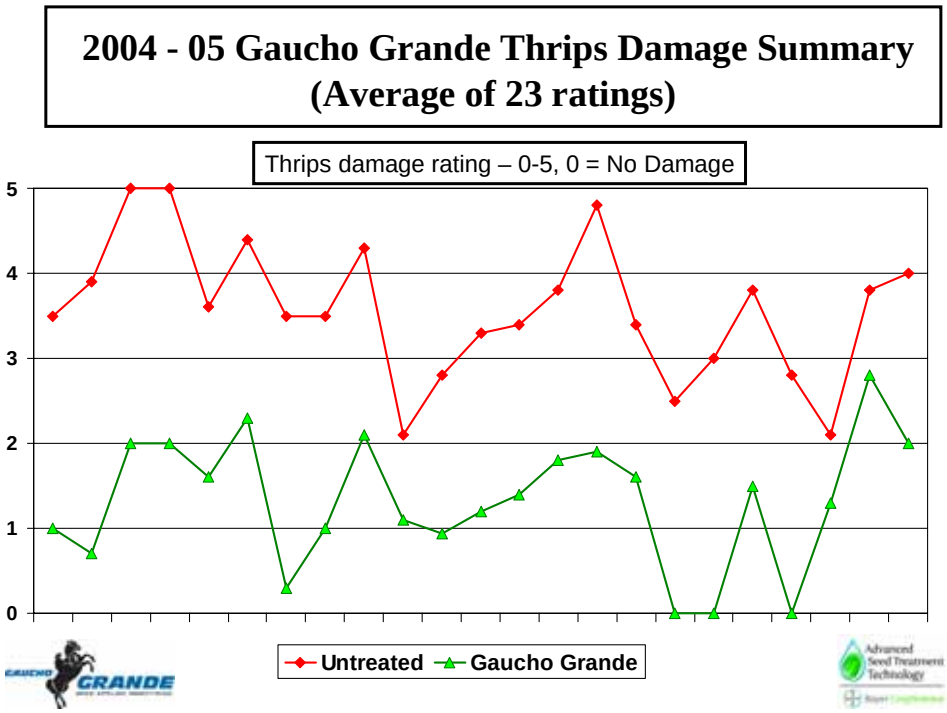
Trial results reported were obtained from small plot trials that were conducted by university cooperators across the Mid-South and Southeastern cotton growing states, including Virginia, North Carolina, Georgia, Alabama, Mississippi, Louisiana, Arkansas and Tennessee. A summary of data from 2004 and 2005 involving eight universities was evaluated . Cotton was grown using normal commercial practices for each area. Data collected from these locations, include adult and immature thrips per plant, thrips damage ratings, and yields.

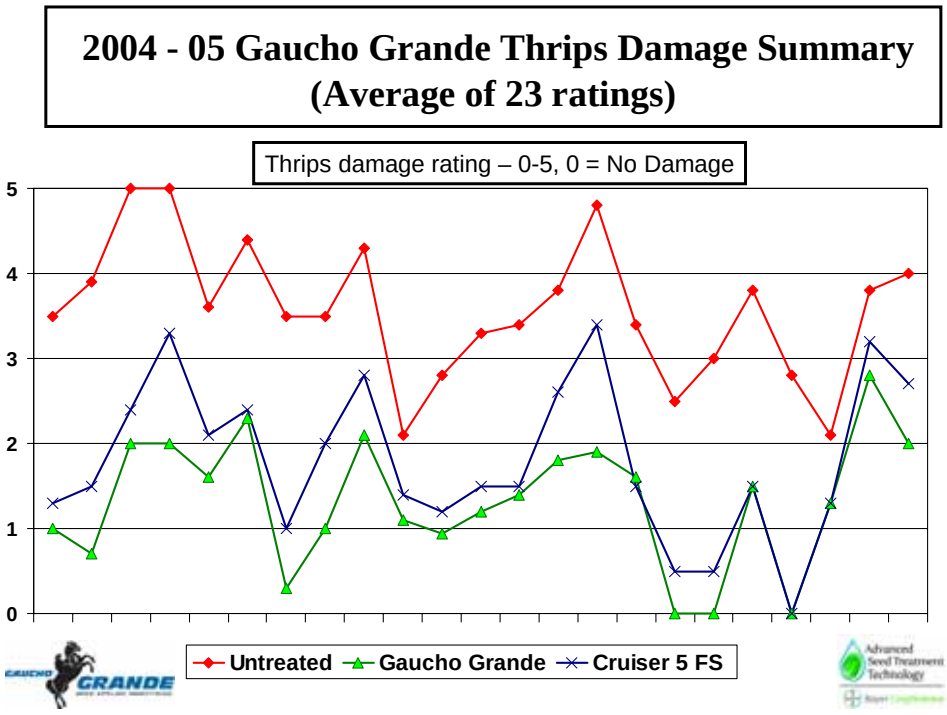
Results and Discussion

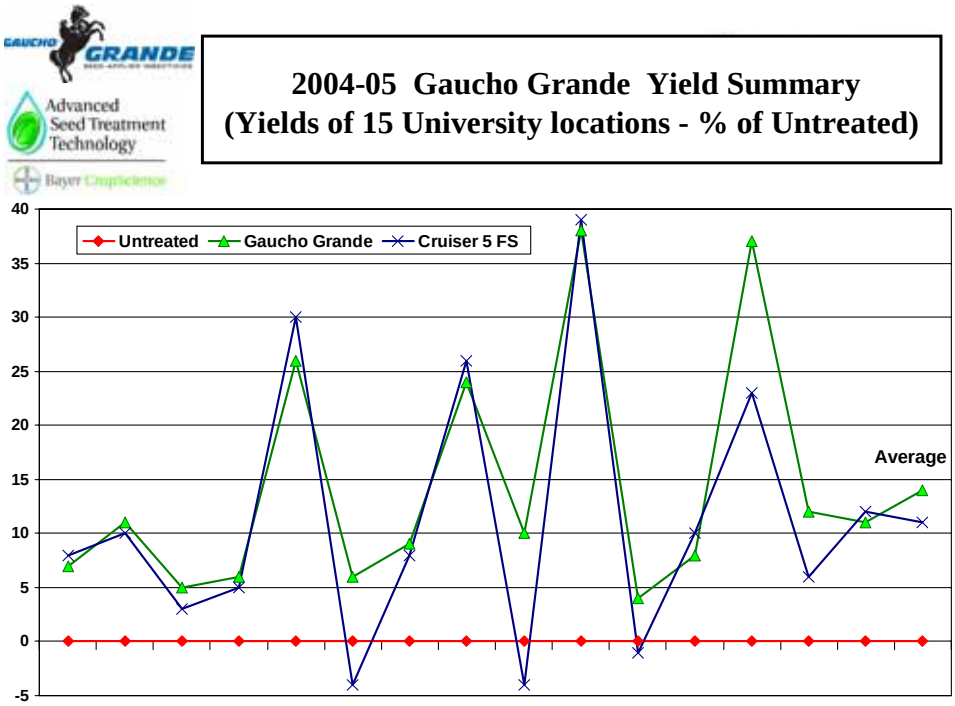
The consistency of performance of GAUCHO GRANDE in controlling thrips damage is shown in table one. GAUCHO GRANDE had less thrips damage at every rating in 2004 and 2005 when compared to the untreated control. GAUCHO GRANDE also had overall less thrips damage when compared to CRUISER (see Table two). GAUCHO GRANDE also provided consistent yield increases when compared to the untreated control when observed in 2004 and 2005. GAUCHO GRANDE increased yields by an average of 14% when averaged across all locations (See Table 3). GAUCHO GRANDE had higher yields when compared to CRUISER in 9 of 15 trials (See Table 3).

Summary

The results from these trials indicate that GAUCHO GRANDE delivers excellent crop and pest management flexibility, providing the grower with optimum early season insect protection. GAUCHO GRANDE provides extended protection against early season insect pests including early season damage caused by aphids and thrips.






GAUCHO GRANDE
Advanced Seed Treatment Technology
Bayer CropScience
2004-05 Gaucho Grande Yield Summary
(Yields of 15 University locations - % of Untreated)
Untreated
Gaucho Grande
Cruiser 5 FS
Average
40
35
30
25
20
15
10
5
0
-5