

ALABAMA WHEAT AND FEED GRAINS PRODUCERS
PROJECT SUMMARY
YEAR 2006

TITLE: Control and Detection of BYD in Wheat

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SUMMARY:

Test 1: 'Pioneer 26R12' was planted at three locations in Alabama: Gulf Coast Res. and Exten. Center at Fairhope, Sand Mountain Res. and Exten. Center at Crossville and Tennessee Valley Res. and Exten. Center at Belle Mina. Plots were planted with seed treated with one of two products [Cruiser 5FS (Syngenta) and Gaucho XT (Bayer)] or left without treatment, for a total of three treatments. To each of these treatments at Fairhope, Warrior was applied to plots at 25-30 days after planting, in mid-February, or not at all. No significant increases in stand counts nor reductions in disease were observed in seed-treated plots. No improvement in yield or kernel weight was observed in seed-treated plots at Fairhope and Belle Mina, however seed treatments tended to improve yield or kernel weight at Crossville. Due to the late emergence of the wheat in north Alabama, the first foliar application was not made until mid-January in Crossville and only 1 application was made at Belle Mina in early March. The later foliar application tended to reduce disease and improve yield at all locations, though not significantly. There were no significant improvements in kernel weight with any treatment other than at Belle Mina, where the kernel weight was significantly improved by Gaucho seed-treatment over the Cruiser seed-treatment but not over the non-treated seed.

Test 2: Three varieties of wheat ('AGS 2000', 'Coker 9152', and 'Pioneer 26R12') were planted at four locations in Alabama: Gulf Coast Res. and Exten. Center at Fairhope, Wiregrass Res. and Exten. Center at Headland, Plant Breeding Unit at Tallassee, and Sand Mountain Res. and Exten. Center at Crossville. Plots were planted with seed treated with Cruiser 5FS (Syngenta) or left without treatment, for a total of two treatments for each variety. To each seed treatment, Warrior was applied to plots in mid-February or not at all. Disease onset was slightly later and incidence tended to be lower at all locations. Stand counts improved slightly with seed-treatments on 'Pioneer 26R12' at Fairhope and on 'AGS 2000' at Crossville and Headland. At Tallassee, plots of seed-treated 'Coker 9152' were significantly improved, however, yields tended to be reduced by seed treatment. Disease tended to be reduced with the insecticidal seed treatment and foliar application. Slightly increased yields in plots with the foliar insecticide application were observed in Crossville and Headland. Kernel weight was not consistently affected by any treatment.