

## Screening commercial cotton varieties against Fusarium wilt. 03-237AL

William Gazaway, 151 ALFA Building, Department of Entomology and Plant Pathology, and Kathy Glass, Department of Agronomy and Soils, Auburn University, AL 36849 .

The purpose of this study is to identify commercial cotton varieties currently grown in Alabama that are susceptible or have tolerance to Fusarium wilt (FW). Results are normally published in a tabular form on line and in the AL Cotton IPM each year.

Methods: Fifteen of the most commonly grown cotton varieties were planted late (14 Jun) due to lack of rain. The field was extremely dry and had to be irrigated to obtain a stand. Rowden, an extremely susceptible cotton variety, was planted as a control. Plots were 20 feet long and 16 rows wide. The test consisted of five (5) replicates. Plants were evaluated for wilt soon after they reached the first true leaf stage. Plants showing FW symptoms were counted and removed. Plots were checked for wilt on a weekly basis and evaluated as symptoms appeared throughout the growing season.

Results and Discussion: Very little wilt occurred during the 2007 growing season due to the extreme drought and heat. Root-knot nematode damage, which is critical for FW to occur, was very light in 2007. Consequently, there was insufficient wilt in the plots this past year to separate cotton varieties' reaction to FW (see Table below).

### 2007 Commercial Variety Fusarium Wilt - Plant Breeding Unit Tallassee, AL

Variety	Rep 1	Rep2	Rep 3	Rep 4	Av wilt %
<b>Rowden</b>	<b>8</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>6</b>
PhytoGen PHY 480WR	6	5	0	0	3
Fiber Max FM 9063B2F	3	4	1	1	2
Deltapine DP 454BG/RR	5	0	1	3	2
Fiber Max FM 1735LLB2	0	5	0	3	2
Deltapine DP 445BG/RR	3	2	0	0	1
DynaGro DG 2520B2RF	0	1	2	0	1
Deltapine DP 555BG/RR	0	1	2	0	1
Fiber Max FM 960BR	1	0	1	0	1
Stoneville ST 4664RF	0	2	0	0	0
Deltapine DP 143B2RF	0	1	0	0	0
PhytoGen PHY 485WRF	1	0	0	0	0
Stoneville ST 6611B2RF	0	0	0	0	0
Crop. Gen. CG 3020B2RF	0	0	0	0	0
Deltapine DP 515BG/RR	0	0	0	0	0
Deltapine DP 444BR	0	0	0	0	0

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x - added in 2007