

## California Uplands Advanced Strains Screening Trials

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Changes in the California cotton industry enacted in 1998 allow for a much broader range of varieties to be grown in the SJV. It will be important for growers to have unbiased sources of varietal performance information that will answer some of the questions regarding yield performance, growth characteristics and quality of available varieties. These trials involving newly-available CA Upland varieties complement the combined SJV Cotton Board and the UCCE Farm Advisor Approved Acala studies. Trials include standard varieties of Acalas in order to have some more complete indices of varietal comparisons. The range of yield potential as well as the range of quality characteristics across the varieties now available will mean that growers have an even more difficult job than usual in balancing the combination of yield and quality (and resulting price).

The primary objective of this project is to test non-Acala CA Upland varieties under a broad range of environmental and management conditions throughout the San Joaquin Valley. The goal of this project is to provide independent University of CA data on varietal yield, growth performance and quality at a minimum of two SJV locations over years to give a broad-based idea of the consistency or lack of consistency in varietal performance. This information all is collected as part of a large data base that describes the degree of cultivar differences in earliness, components of growth as measured using data from final mapping, and quality of yield (Fiber characteristics, seed percent) as well as yield potential. CA Upland screening trials give growers a continuously-updated comparison of newly-available non-Acala Upland varieties from a wide range of seed companies versus one or two Acala varieties which have been available in the SJV for one or more years. These tests are not replicated in any other independent tests done by UCCE, and represent an opportunity to evaluate some of the newer varieties from seed companies for yield performance and fiber quality characteristics.

Studies are being conducted again at the Shafter and West Side Research and Extension Centers in randomized complete block designs with four replications. These two locations represent a sandy loam and clay loam soil type, respectively. Plot size at the Research station locations will be four 40-inch rows by 70 feet in length (quarter plot length), with 19 varieties being tested in 2008.

Entries in these field evaluations for 2008 trials are included in the following table:

**Program Summary for 2008 – Advanced Strains Trials.** These evaluations were done at the UC Research Centers at Shafter and West Side.

2008					
<b>Company providing seed</b>	<b>Variety Name</b>		<b>Company providing seed</b>	<b>Variety Name</b>	
Phytogen	PHY-375 WRF		Phytogen	Phy-72	Approved Check
Bayer	FM-835 LLB2		Bayer	FM-840 B2F	
Bayer	FM-1735 LLB2		Bayer	BCSX-4366 B2F	
Bayer	ST-4498 B2RF		Bayer	ST-5458 B2RF	
Delta and Pine Land	07W505 DF		Delta and Pine Land	07W902 DF	
Delta and Pine Land	07X440 DF		Delta and Pine Land	MCS0701 B2RF	
Delta and Pine Land	06T201 F		USDA-ARS	SJ-08U01	
USDA-ARS	SJ-08U02		USDA-ARS	SJ-08U03	
USDA-ARS	SJ-08U04		USDA-ARS	SJ-08U010	
USDA-ARS	SJ-08U011				

**Data collection and availability from field trials:**

Summaries of prior year trial results are available at <http://cottoninfo.uc-davis.edu/>). In addition, results are presented at the Cotton Workgroup meetings and at winter and spring grower/PCA meetings of the University of California.

\* This research was supported through donations from participating seed companies and by the West Side and Shafter REC's.