

CA UPLAND VARIETY TRIALS - LARGE-SCALE AND SCREENING

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1999 Studies

In 1999, studies are underway at nine locations in the San Joaquin Valley in tests run by our office in cooperation with the six San Joaquin Valley UCCE cotton Farm Advisors. At the time of writing this report, we have limited data to report, since no final plant mapping data have been analyzed and we are still a way off from defoliation and harvest. Instead, the following will be a brief description of the type of testing program initiated for 1999, and data collection plans.

Two different types of studies are underway this year, (a) a large-scale plot study on grower fields to evaluate varieties in large plots, where adequate seed is available; and (b) a smaller-scale screening trial to evaluate varieties where less is known of expected performance, or where limited seed is available (making them more suitable for small-plot studies).

Large-Scale Trials

We have a six-location study that for 1999 involves twenty-one varieties planted at six grower fields (one in each of the six cotton-growing counties of the San Joaquin Valley). These are large-scale tests, with three or four replications of four to eight row plots that range from about 600 to over 2600 feet in length, depending upon the site. Final yield data will be collected, along with samples to determine HVI quality characteristics. Late-season field data will be collected to evaluate the presence of significant *Verticilium* wilt problems in fields, and relative differences in earliness (estimated using NACB measurements) and relative difficulty in defoliation across varieties. The Acala varieties "Maxxa" and "Phytogen 33" were included for comparison purposes in these Upland tests. Varieties included in this test for 1999 are:

<u>Company</u>	<u>Entries</u>
CPCSD	(Maxxa)
Phytogen	(Phytogen-33, PSC-413, GA-161)
AgrEvo	(FiberMax 989, ACSI IF-1000)
AgriPro	(AP-6101, AP-7115)
Stoneville	(BXN-47)
Olvey and Associates	(OA-36)
Buttonwillow Research	(BR-C9801, BR-C9802)
Paymaster	(PM-1560BG)
Delta Pine	(Nucotton 33B, 448-B)
Suregrow	(SG-747, SG-501)
Helena Cotton Research	(HCR-9220, HCR-7114-46)
Germain's Cotton	(GC-400 BG, GC-204)

Screening (Advanced Strains) Trials

These trials are conducted in three field locations, the West Side and Shafter Research and Extension Centers of the University of CA, plus a grower test location in Merced County. Field trials are generally small, with four replications and 50 to 150 foot row lengths in four or six-row trials. Maxxa and Phytogen-33 Acala varieties were also included in these trials for comparison purposes. Data collection will be similar to that in the Large-Scale Upland trials described above. The 28 varieties entered in the Screening Trials are as follows for 1999:

<u>Company</u>	<u>Entries</u>
CPCSD	(Maxxa)
Phytogen	(Phytogen-33, PSC-355, HS-12, PSC-952)
AgrEvo	(ASCI EXPO-223, ACSI-EXPO-052, ACSI-EXPO-781)
AgriPro	(APX-9257, APX-7126, AP-6102)
Olvey and Associates	(OA-77, OA-66)
Buttonwillow Research	(BR-9904, BR-9905, BR-9906)
Paymaster	(PM-1560 BG / RR)
Delta Pine	(Topaz, Pearl)
Suregrow	(SG-105, SG-821)
Helena Cotton Research	(HCR-9240, HCR-9310, HCR-9263)
Germain's Cotton	(GC-9810, GC-9811, GC-9812)
Pure Genetics	(VT-901)

1998 Studies

1998 studies were run by Dr. Dick Bassett and the San Joaquin Valley Cotton Board, with a fairly restricted number of entries. Results from those 1998 studies are available in reports of the San Joaquin Valley Cotton Board, or can be obtained by contacting the office of Dr. Dick Bassett.