

**CPCSD ACALA GTO MAXXA AND ACALA C-141:
NEW CALIFORNIA ACALAS FOR THE
SAN JOAQUIN VALLEY**

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Abstract

California Planting Cotton Seed Distributors (CPCSD), a 100% grower-owned organization for the development of improved cotton varieties, is announcing the release of two new Acala varieties for the San Joaquin Valley of California. The new cottons, CPCSD Acala GTO Maxxa and CPCSD Acala C-141, completed the required testing by the San Joaquin Valley Cotton Board (SJVCB) and were released in March 1997. While these cottons were tested as CPCSD experimental's C-141 and C-143, C-143 has been subsequently renamed Acala GTO Maxxa. In the SJVCB testing program, conducted by Dr. Dick Bassett, the new varieties were compared to the SJVCB cotton standard, Acala Maxxa, and are required to meet and/or exceed this standard of fiber quality to qualify for approval (Table 1.).

Acala C-141 is characterized by improved spinning performance and higher lint yield. Acala C-141 fiber is slightly stronger and produces yarns of greater strength when compared to the standard Acala Maxxa. Acala C-141 has a lower gin turnout than Maxxa, but produces more seedcotton per acre, and has resulted in yield increases of up to 14% during the three year (20 locations) SJVCB testing program.

Acala GTO Maxxa is characterized by a high gin turnout, hence its name, and high yield potential. Gin turnouts of 40% and greater are common for Acala GTO Maxxa, nearly 2.5% higher than the SJVCB standard. During the SJVCB evaluation Acala GTO Maxxa produced an average of 3% higher lint yield per acre and a yield increase of 7% on moderate Verticillium-wilt infested soil when compared to the SJVCB standard. The fiber quality of Acala GTO Maxxa compares favorably with the SJVCB standard while consistently produces higher lint yields.

Acala GTO Maxxa and Acala C-141 have high levels of Verticillium-wilt tolerance and have also yielded well on non-wilt infested soils. Plant Variety Protection with the United States Department of Agriculture has been applied for both Acala GTO Maxxa and Acala C-141.

Table 1. SJVCB Acala Variety Test¹

	Acala Maxxa	Acala Maxxa	GTO C-141	Acala CV%
Lint Yield (lbs/A)	1383 b ²	1478 a	1386 b	4.5
Seedcotton (lbs/A)	3918 b	3869 b	4089 a	5.1
Gin Turn-out (%)	35.3 b	38.2 a	33.9 c	1.6
Plant ht. (inches)	45 a	46 a	45 a	6.8
Seed Index (g/100)	12.2 a	12.4 a	12.2 a	6.2
Fiber Length (2.5%)	1.169 b	1.191 a	1.166 b	1.3
Uniformity ratio	46.4 b	46.6 b	47.8 a	2.2
Fiber Str. (T1 stel)	30.2 b	30.5 b	31.0 a	2.3
Elongation (E1 stel)	5.6 c	5.9 b	6.6 a	3.9
Yarn Str (Ne 22)	146 b	150 a	149 a	2.2

¹ Summary of 1995-96 SJVCB Variety Test data, 16 locations.

² Letters within rows indicate significance at .05 level

