

**CPCSD ACALA BXN NOVA: A BXN® ACALA
COTTON FOR THE SAN JOAQUIN VALLEY**

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Abstract

The California Planting Cotton Seed Distributors (CPCSD), a 100% grower-owned organization for the development and production of cotton varieties, is announcing the release of Acala BXN Nova: a new transgenic cotton variety for the San Joaquin Valley of California. CPCSD's Acala BXN Nova is the first Acala cotton variety approved by the San Joaquin Valley Cotton Board (SJVCB) to incorporate the BXN® System technology which allows applications of the broadleaf herbicide Buctril® 4EC. Evaluated under the experimental designation CPCSD C-181, Acala BXN Nova completed the required three years of SJVCB testing and was approved for commercial planting within the San Joaquin Valley Quality Cotton District in March 2001. The SJVCB program evaluates experimental candidates for approval against the District Standard, Acala Maxxa, and only cotton varieties judged as exceeding this standard qualify for approval by the board.

Acala BXN Nova was developed through a backcross program with Acala Maxxa as the recurrent parent, and as a result is similar to the SJV standard in yield, most plant traits, Verticillium-wilt tolerance (Table 1.), and is characterized by excellent fiber and spinning performance (Table 2.). Acala BXN Nova combines the BXN technology with high quality, high yielding Acala germplasm that contributes to reducing cotton production costs through the control of specific tough broadleaf species by applications of Buctril 4EC herbicide. Plant Variety Protection has been applied for Acala BXN Nova.

Table 1. SJVCB Acala Variety Test – Crop Traits¹

Trait	Acala BXN Nova	Acala Maxxa	CV%
Lint Yield (lbs/A)	1471 a ²	1490 a	6.0
Plant Height (inches)	40.6 a	40.6 a	11.5
Seed Index (g/100)	12.6 a	12.1 a	11.9
Vert-wilt Rating (% defoliation)	39 a	31 a	41.7
Lint Percent (%) ³	42.8 b	43.0 a	3.3
Gin Turn-out (%)	35.3 b	35.9 a	1.8

¹Data summarized from 2000 SJVCB Variety Tests (8 locs).

²Letters within rows indicate significance at .05 level.

³Lint Percent data summarized from 1999 SJVCB Variety Tests (8 locs).

Table 2. SJVCB Acala Variety Test – Fiber Traits¹

Trait	Acala BXN Nova	Acala Maxxa	CV%
HVI Fiber Length (2.5% sl)	1.153 a ²	1.153 a	5.7
HVI Uniformity Index (%)	82.7 a	83.8 a	8.8
HVI Fiber Strength (g/tex)	33.0 a	33.3 a	1.8
HVI Elongation (%)	6.2 b	6.2 b	2.5
HVI Micronaire	4.18 a	4.05 a	9.6
Ne 22 Yarn Strength (mN/tex)	135 a	139 a	4.2

¹Data summarized from 1999-2000 SJVCB Variety Tests (16 locs).

²Letters within rows indicate significance at .05 level.