New CSIRO/CSD varieties for 2004

By CSD Extension and Development team*

New CSIRO/CSD cotton varieties launched at a special function at Moree by National Farmers Federation president and Goondiwindi cotton grower, Peter Corish, contain many new features including improved fibre quality, disease resistance, growth habit, maturity, and regional adaptability.

Peter launched several new CSD Bollgard, Bollgard Roundup Ready, Roundup Ready and conventional varieties. He said he was both surprised and delighted that the CSIRO breeding team had continued its tradition of producing varieties with potential to surpass and replace the stalwart varieties that had underwritten the past profitability and performance of the industry.

The suite of more than 13 CSIRO/CSD varieties represents the largest group of new varieties ever made available to cotton growers in a single season.

CSD general manager, Adam Kay, said the new varieties included the best ranking variety for fusarium resistance, Sicot F-1 (F.Rank 220 (5)) since the industry benchmarking system of ranking varieties for fusarium resistance was introduced.

He said a feature of the new varieties was their regional adaptability, with varieties available for all major cotton growing regions, and also for both dryland and irrigated situations.

"There is a good mix of varieties, including early maturing and full season varieties, and varieties with okra leaf characteristics as well.

"But the key features are continuous progress in terms of yield and fibre quality potential, coupled with improved performance in terms of Fusarium resistance."

Following are general characteristics of the new varieties:

BOLLGARD II VARIETIES

Sicot 289B

This variety is derived from Sicot 289i and retains many of the characteristics of that variety having been developed by backcross from Sicot 189. Sicot 289B is relatively late maturing and a larger plant type. It has good fibre length and strength.

Micronaire is the same as Sicot 289i and for this reason in warm locations should be managed to avoid high micronaire. Fusarium resistance is similar to Sicot 189. Sicot 289B is recommended for central, northern and western growing regions.

Sicala 40B

Has similar characteristics to Sicala 40. It is relatively early maturing and is therefore recommended for southern and eastern regions. Fibre is long, strong and of intermediate micronaire. Fusarium resistance is better than Sicala 40.

Siokra V-18B

Has similar characteristics to Siokra V-18. It is recommended for eastern and southern locations where okra leaf host plant resistance is required. Fibre quality is good and Fusarium resistance is similar to Siokra V-18.

Siokra V-16B

Has similar characteristics to Siokra V-16 and is specifically intended for dryland production systems free of Fusarium wilt.

Other experimental lines being developed include **Sicot 80B**. It has a good disease resistance package, with Fusarium resistance similar to Sicot 80 and it displays good fibre quality. This variety will be a good option for dryland production in northern and western regions because of its heat tolerance, disease resistance and intermediate micronaire. Growth regulators may be required to manage plant growth habit under fertile conditions.

It may have limited release in 2004 if overall performance is confirmed this season.

BOLLGARD II/ROUNDUP READY VARIETIES

Sicot 289BR

Retains many of the characteristics of Sicot 189. It is a full season type with vigorous growth. Growth regulators may be required to manage plant growth habit under fertile conditions. Micronaire is only 0.1 units lower than Sicot 289RRi and for this reason in warm locations should be managed to avoid high micronaire.

Fusarium resistance is similar to Sicot 189. Sicot 289BR is recommended for central, northern and western growing regions as well as dryland situations.

It gave an average yield of 9.6 bales per hectare in two seasons of testing in Emerald.

Sicala 40BR

Has similar characteristics to Sicala 40. It is relatively early maturing and is therefore recommended for southern and eastern regions. Fibre is long, strong and of intermediate micronaire. Fusarium resistance is considerably better than Sicala 40.

Sicala V-3BR

Is derived from Sicala V-3RRi and has similar growth habit to that variety and is recommended for southern and eastern locations. Fibre quality and Fusarium resistance are better than for Sicala V-3RRi.

Ralph Schulzé, John Blood and Tony Bailey at the new CSIRO/CSD cotton varieties launch in Moree recently.