



Project CULTIVAR TRIAL Project leader

Producer Contractor
Locality Makhathini Experimental Farm
Varieties DP 1531, DP 1240
Layout Randomized block design with 5 repetitions
Plant population densities 66 000 plants/ha & 86 000 plants/ha
Plot size: 16m²

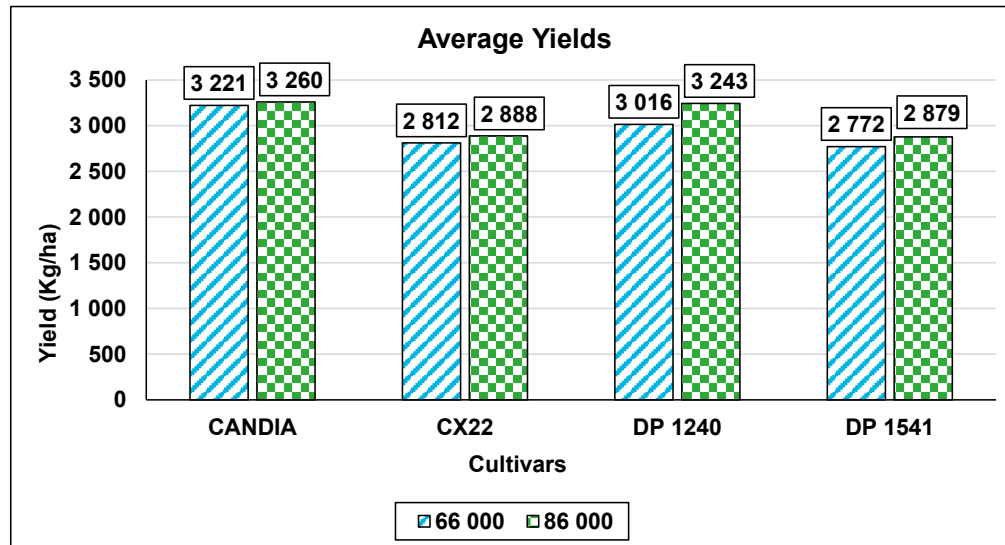
Steyns' Agricultural Services

Irrigation:
Rain

- Treatments**
1. DP 1240 66 000 plants/ha
 2. DP 1240 86 000 plants/ha
 3. Candia 66 000 plants/ha
 4. Candia 86 000 plants/ha
 5. CX22 66 000 plants/ha
 6. CX22 86 000 plants/ha
 7. DP1541 86 000 plants/ha
 8. DP 1541 66 000 plants/ha

Cultivar	Population	Boll rot
Candia	66 000	13,7%
Candia	86 000	13,4%
CX 22	66 000	21,7%
CX 22	86 000	16,0%
DP 1240	86 000	20,5%
DP 1240	90 000	19,7%
DP 1541	94 000	19,6%
DP 1541	98 000	19,9%

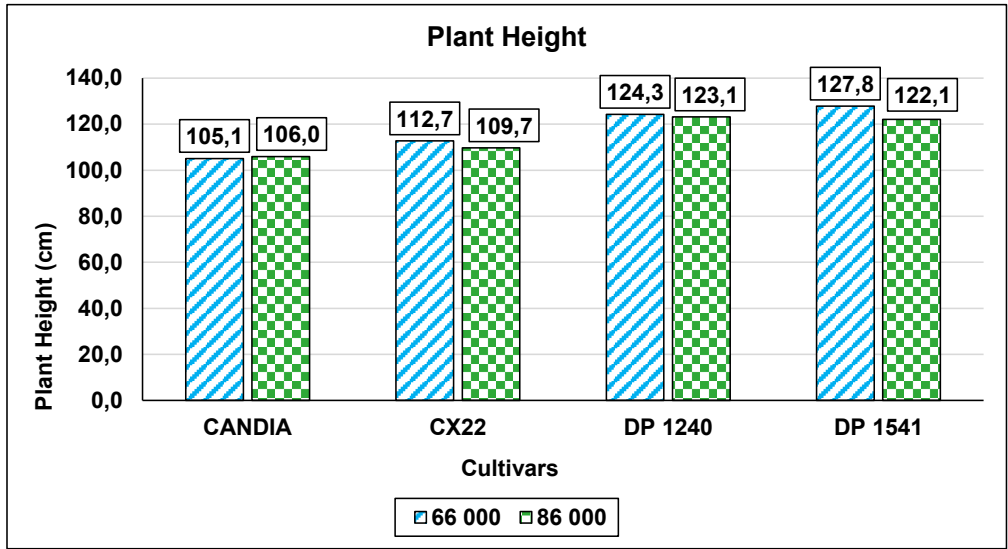
Remark: Humidity caused major issues wit boll rot



Earliness

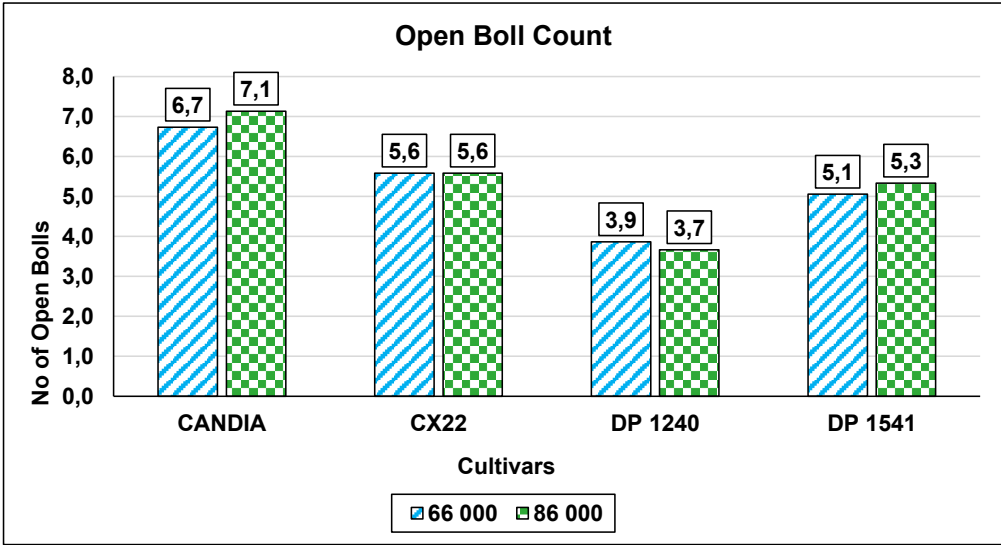
Pick 1 Pick 2 Pick 3

Avg Yield
3010,18



* Plantheight Average plant height (cm)
117,03

Candia had the shortest plant heights
DP 1541 had the tallest plants at 66 000
DP 1240 had the tallest plants at 86 000



Boll counts: Average open boll count
5,35

The humidity caused issues with boll rot as seen in the number of bolls



Quality parameters	Length (UHML - Inches)		Uniformity (%)		Strength (gram/tex)		Micronaire		Spining Consistency index (SCI)	
	66 000 Plants/ha	86 000 Plants/ha	66 000 Plants/ha	86 000 Plants/ha	66 000 Plants/ha	86 000 Plants/ha	66 000 Plants/ha	86 000 Plants/ha	66 000 Plants/ha	86 000 Plants/ha
Treatments										
Candia	1.175 (1 5/32")	1.184 (1 3/16")	83,2	83,2	30,4	30,8	3,1	3,2	152	152
CX22	1.177 (1 3/16")	1.158 (1 5/32")	82,9	82,4	31,4	31,4	3,6	3,5	149	147
DP 1240	1.178 (1 3/16")	1.168 (1 5/32")	84,0	83,4	32,3	31,8	4,1	4,1	151	145
DP 1541	1.152 (1 5/32")	1.154 (1 5/32")	82,9	82,9	30,5	30,2	4,2	4,5	138	135
Std dev	0,034	0,031	1,1	0,9	1,6	1,6	0,7	0,6	11,1	9,5

Length: The length of all cultivars was good , long fibre

Uniformity: The uniformity is 82 % and above

Strength: The strength values are all above 30g/tex. DP 1240 has the highest strength of 32.3 g/tex

Micronaire: Candia has some low micronaire values of 3.1 and 3.2. DP 1541 has the highest micronaire of 4.5

SCI: The spinning consistency index is above 150 due to good fibre qualities especially uniformity, the micronaire of DP 1541 brings it down slightly.

Conclusion: The performance of all cultivars is good in the growing conditions and is very comparable. Interestingly CX 22 splits the difference between Candia and the DP cultivars in terms of fibre quality characteristics