

Trial 9.

Chickpea Variety Trial

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Aim: to compare yield and agronomic attributes of current and future variety releases of chickpeas.

Trial design and management: 18 varieties x four replications. Plot size: 5m x 6 rows. Sown: 14 May
Harvested: 20 December. Chemical control of weeds with Lexone (200 g/l) and of insects with Endosulphan (0.5 l/ha) at sowing.

Results:

Variety:	Emergence	Early vigour	Crop height	Lodging	Yield	100 grain weight	% >9mm grain (kabuli only)
	(1= good, 5= poor)	(1=good, 5=poor)	(cm)	1=erect, 9=prostrate)	(t/ha)	(g)	
<i>Desis</i>							
Amethyst	2.8	2.5	54	2.3	0.84	15.4	
Desavic	1.8	3.0	44	1.3	0.90	20.0	
Dooen	1.8	2.0	50	3.8	0.90	15.6	
Lasseter	2.0	2.0	53	3.0	1.05	22.9	
Norwin	2.0	2.8	50	2.5	0.93	15.6	
Tyson	2.3	3.0	44	1.8	1.11	13.4	
CTS11308	2.3	2.3	47	2.8	1.17	16.2	
CTS60543	1.5	2.0	46	1.8	0.99	16.5	
ICCV88201	2.0	1.5	57	3.0	1.15	19.8	
ICCV88202	2.0	2.0	49	3.0	1.02	19.0	
T1239	2.5	2.0	54	2.8	0.89	22.0	
8627P.2	2.0	2.5	52	3.0	1.00	16.9	
86130.5	2.0	2.3	51	1.8	1.29	19.8	
<i>Kabulis</i>							
Garnet	2.0	2.0	56	3.3	1.18	36.1	41
Kaniva	1.5	2.0	55	3.5	1.28	38.2	50
G846.1.2B	1.3	1.3	59	3.5	1.14	44.0	69
G846.2.3B	1.0	1.0	57	3.5	0.97	43.7	67
G486.2.5	1.5	1.3	56	3.0	1.37	41.5	71
Least significant difference as t/ha (P=0.05)					0.28		
Coefficient of variation %					17.5		

Discussion:

The unusually cool spring weather, including a severe night frost, delayed pod set but yields obtained were still average. The trial results were quite variable. The analysis indicates that a variety should have yielded at least 0.28 t/ha more than others to be significantly superior. The season suited the desi Tyson which yielded well among the current desi varieties. Of particular interest are the recent and coming desi releases, Lasseter (Vic) and ICCV88202 (WA) which yielded slightly less here than Tyson but compared well with the other standard varieties such Dooen and Desavic. The lower than usual daily spring temperatures and subsequent delays in pod set, made it difficult to assess comparative flowering times. ICCV88202 commenced flowering at approximately the same day as Tyson (one day earlier) in most Mallee trials, followed by Lasseter (2 days later) and Desavic (3 days later). The new selection from the national chickpea breeding program, entry

86130.5 performed well here and in other 1996 Mallee trials and seed increase of this line for commercial production will commence in 1997.

The excellent yields obtained from the current kabuli varieties, Kaniva and Garnet, are noteworthy, but **G846.2.6**, the new kabuli release from NSW, stands out as the top yielder. This entry, which attracted a lot of interest at the field days because of its good erect growth, is producing a much higher proportion of 9mm and larger grain in its harvest sample than Kaniva (see table). Kabuli types have not shown superior yields compared to desis in past Mallee and Wimmera trials.