

Brim chickpea demonstration

Method

Six varieties (four desi and two kabuli varieties) were sown at 100kg/ha in the nearest neighbour design with Sona as the control. 50kg/ha of MAP was applied at sowing. No other fertiliser was applied.

Chemical

800ml/ha Simazine 500[®] and 800ml/ha Atrazine 500[®] (June 23)

150ml/ha Targa[®] (August 7)

1l/ha Checkout[®] (Chlorothalonil)(August 8)

1l/ha Checkout[®] (September 11)

Results

Table 1: Chickpea yield and quality, Brim.

Variety	Yield (t/ha)	Defective (%)	Poor Colour (%)	Foreign material
Howzat	0.9	0.5	0.0	1.9
ICCV 96836	0.8	0.6	1.7	1.8
*Sona	0.8	0.2	0.9	1.9
Bumper	0.6	8.8	0.0	1.2
FLIP 94-508C	0.5	0.3	0.5	1.0
Kaniva	0.5	+24.4	0.0	7.1
LSD (5%)	0.1	0.6	0.8	1.3
CV %	6.5	-	-	-

* Control variety – results presented are average for the control plots at the site.

+ High result due to desi contamination within the sample from harvest of a desi plot prior to Kaniva. This result is NOT representative.

Interpretation

The desi varieties Howzat, ICCV 96836 and Sona, yielded the highest in this trial. However, yields at the site were low due to below average GSR, low rainfall and high temperatures in November combined with the current necessity to sow chickpeas late in the season to avoid disease.

Quality parameters for chickpea receival were met for all varieties. The high defective result for Kaniva was due to sample contamination with desi chickpeas due to harvest order. This is unavoidable in large scale trials harvested with a commercial header.

While ICCV 96836 performed as well as Howzat, this line will not be released as it is only moderately resistant to ascochyta. FLIP94-508C did not perform very well at this site as it is suited to higher rainfall areas. Commercial release is proceeding for this variety.

Chickpeas have not been widely grown in the Brim district since the outbreak of ascochyta in 1998. This trial has shown it is possible to grow chickpeas in the district and newer lines with improved disease resistance show promise for the future and would eliminate the need for a fungicide in this district. Improved disease resistance may also allow newer lines to be sown earlier, which is likely to have a yield affect – especially in shorter growing season districts such as Brim.