

Nitrogen Application in Chickpeas 2012

Individual Trial Results



Trial:	AM1205
Location:	"Ulumbie", ~10 km east of Walgett, NSW
Planting date:	13/6/2012
Plot size:	12 x 2 m on 32 cm row spacings
Trial design:	Randomised complete block with four replicates
Variety:	PBA HatTrick
Soil nitrate level:	<12 kg N/ha from 0-90 cm at 15/5/2012 (excluding mineralisation credit)
Basal fertiliser:	Granulock SuPreme Z 80 kg/ha to all plots

Treatments:

Treatment	Additional Nitrogen applied kg/ha	Nitrogen timing	Rhizobia inoculation
1	0	Planting	Nil
2	23	и и	Nil
3	46	и и	Nil
4	0	и и	Plus
5	23	и и	Plus
6	46	и и	Plus
7	23	In-crop	Nil
8	46	и и	Nil
9	23	и и	Plus
10	46	и и	Plus

All 'Additional Nitrogen' was surface applied as Urea.

Urea at planting:	Spread on the 13/6/2012, incorporated by sowing (IBS) with narrow point tynes. First significant rainfall, ~38 mm between 11-14/7/2012	
In-crop Urea:	Applied on the 21/9/2012, plants flowering. First significant rainfall, ~10 mm on 29/9/2012	
Rhizobia:	Nodulator at 3.3 kg/ha applied with the seed into the planting furrow	

The trial was well managed for weeds, Helicoverpa and Ascochyta



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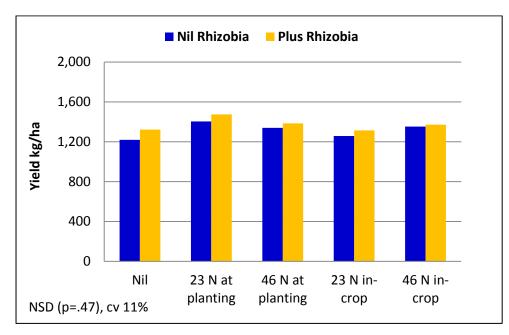


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Emergence:

There was no significant impact on emergence from any treatment with a mean plant stand of $18/m^2$ on the 16/7/2012 (33 days after planting).

Yield:



Key messages:

- This was an extremely nitrogen deficient site with the most consistent levels of 'apparent' yield benefit from nitrogen application at planting
- However there was no significant impact on yield from additional nitrogen at either rate or time of application
- No significant impact on yield from addition of *Rhizobia*

Conclusion:

There was no significant yield response to additional nitrogen at this very low nitrogen site. With no yield benefit obtained, soil testing for residual nitrogen was not warranted.

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