

Trial: RD1208

Location: "Akuna", ~4 km west of Felton, Qld

Planting date: 30/5/2012

Plot size: 12 x 2 m on 26 cm row spacings

Trial design: Randomised complete block with four replicates

Variety: PBA HatTrick

Soil nitrate level: 117 kg N/ha from 0-60 cm at 18/6/2012 (excluding mineralisation credit)

Basal fertiliser: Nil

Treatments:

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

All nitrogen was applied as Urea.

Urea at planting: Pre-drilled on the 30/5/2012 with a disc planter offset from planting furrow. First significant rainfall, ~43 mm between 2-6/6/2012

In-crop Urea: Surface applied on the 9/8/2012, plants ~15-20 cm tall and start of flowering. Negligible rainfall in next month, total ~8 mm to 19/9/2012

Rhizobia: Nodulator at 4.2 kg/ha applied with the seed into the planting furrow

The trial was well managed for weeds, *Helicoverpa* and *Ascochyta*

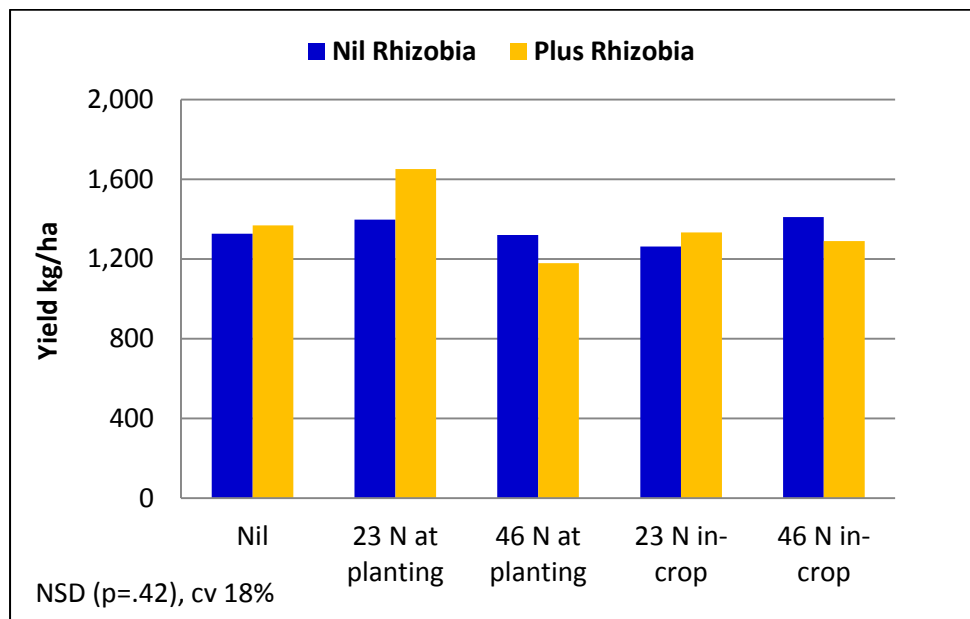
Emergence:

There was no significant impact on emergence from any treatment with a mean plant stand of 35/m² on the 6/7/2012 (37 days after planting).

NDVI:

All plots were assessed with NDVI (Normalised Difference Vegetative Index) on the 6/9/2012. NDVI can provide an indication of 'greenness' or biomass differences between treatments. There was no significant difference between treatments.

Yield:




Key messages:

- No significant impact on yield from additional nitrogen at either rate or time of application
- No significant impact on yield from addition of *Rhizobia*
- Yield variability within treatments was high

Conclusion:

There was no consistent indication of yield response to additional nitrogen at this site. With no yield benefit obtained, soil testing for residual nitrogen was not warranted.

Acknowledgments: Thanks to John Piper – trial co-operator and Rob Duncan (NGA) for field activity

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