

Productivity Highlights

34

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N and P fertiliser in Canola

Background



Key Results

- 24 kg P/ha applied in 2006 increased wheat yield by 0.95t/ha in 2006, and barley yield in 2007 by an additional 0.98t/ha.
- Application of 32kg P/ha in 2007 (after 32 kg P/ha in 2006) increased yield by a further 0.95t/ha up to 6.86t/ha.
- The response to 4kg P/ha freshly applied in 2007 was 0.75t/ha – close to the residual response to 16 kg P/ha applied in 2006 (+ 0.69t/ha).
- There was no residual response to N applied in 2006.

Summary

- P applications can have significant residual value, but is no substitute for freshly applied P.

Nitrogen and Phosphorus

N	P	Yield (t/ha)	Oil (%)	Extra Returns (\$/ha)	Cost (\$/ha)	Yield (t/ha)	Protein (%)
64	0	1.52	10.8	63	0	4.93	10.9
64	8	1.98	10.8	63	0	5.33	10.9
64	16	2.44	10.4	63	0	5.62	10.8
64	24	2.47	10.9	63	0	5.91	10.3
0	0	1.52	10.5	63	4	5.68	10.6
0	32	2.85	11.1	0	32	6.04	10.1
64	32	2.73	11.1	0	32	6.02	9.2
32	32	2.66	11.3	63	32	6.86	10.1

Lsd (0.05)

0.27

nsd

0.59

0.73

Sown 23 May 2007 with Baudin barley into wheat plots sown in 2006