



**AG~NUTRI  
PTY. LTD.**

**KICK START P SEED DRESSING TRIAL, BEULAH 2000**

Measurements conducted by Simon Crane, IAMA Trial Agronomist, Horsham

**Aim:** To measure the effectiveness of the phosphorous seed dressing KICK START P (P 12%, Zn 1.5%, Cu 0.12%, Mo 0.06%) on wheat germination, yield and protein levels in alkaline soils with high phosphorous retention.

Soil Test (ALBRECHT - OCT 99):

Paddock ID - G 13

	Results	Comments
pH	7.4	Slightly Alkaline
Organic Matter	2.24%	Low
Nitrate - N	6 ppm	Desired level - 20
Ammonia - N	3.8 ppm	Desired level - 20
Sulphur (S)	28 ppm	Desired level - 50
Phosphorous - Easily extractable	58 ppm	Desired level - 40
Bray II - Unavailable P	92 ppm	Desired level - 40
Total Phosphorous	601 ppm	-
Calcium (Ca)	5647 kg/ha - (57.87%)	Desired levels - 6635 - (68)
Magnesium (Mg)	1608 kg/ha - (27.47%)	Desired levels - 702 - (12)
Potassium (K)	1245 kg/ha - (6.55%)	Desired levels - 950 - (5)
Sodium (Na)	461 kg/ha - (4.11%)	Desired levels - 224 - (2)
Boron (B)	1.13 ppm	Desired level - 1.2
Iron (Fe)	65 ppm	Desired level - 200
Manganese (Mn)	167 ppm	Desired level - 100
Copper (Cu)	2.28 ppm	Desired level - 4
Zinc (Zn)	3.05 ppm	Desired level - 12
Molybdenum (Mo)	0.39 ppm	Desired level - 1
Aluminium (Al)	562 ppm	-
Soil Colour/Texture	Brown Medium Clay	

**Location:** 20 km NWW of Beulah Township

**Paddock History 1999:**

Crop - Canola (Mystic)  
Fertilizer - 95 kg/ha Mallee Mix + Zn,  
60 kg/ha Anhydrous Nitrogen  
Yield - 1.25 T/ha

**Trial Details:**

Crop - Wheat (Meeri @ 70 kg/ha)  
Sowing Date - 17/05/00  
Fertilizer - 65 kg/ha Granulock 12 Z, 80 kg/ha Extra-Sul  
Seed dressing - 2 L/T Broadacre zinc  
Foliar Sprays - 2 L/ha LIG-POLYPHOS (P 10%)  
Herbicide - Stomp @ 1.2 L/ha pre-emergent  
MCPA LVE @ 500 mL/ha + 5 g Ally post-emergent

**Results:**

Treatment	Yield	Protein	Screenings	Yield increase as a % of Control
Control	3.86 T/ha	9.7%	3.5%	100
KICK START P @ 8 L/T seed	4.08 T/ha	10.4%	3.5%	106

**Comments**

Apart from the yield response, KICK START P also showed obvious visual differences such as 4-5 day earlier germination, longer primary heads and increase grain viability of secondary heads, and distinct height and colour differences up until browning off. One might expect a yield response in the order of 15%+ when visual differences are observed, however crop yield may have been reduced due to low September rainfall and protein response. Also the control received foliar phosphorous (LIG-POLYPHOS @ 2 L/ha) at 5 leaf stage which had shown significant yield and protein benefits in the previous year (1999) on this same property.