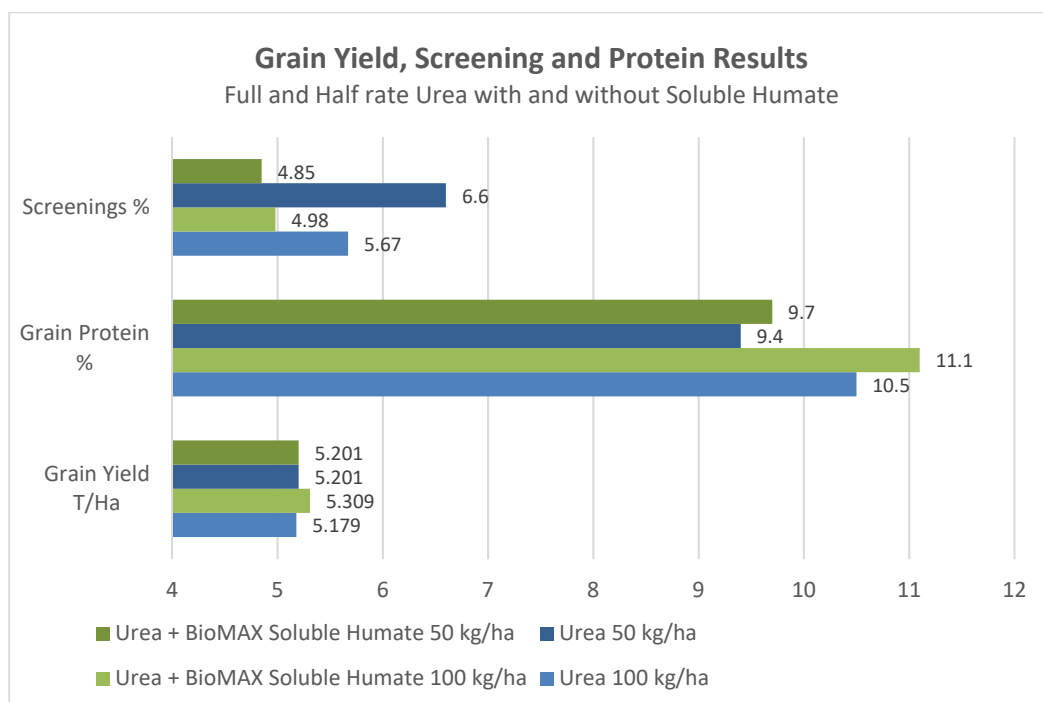




### 2013 Nitrogen Efficiency in Wheat Trial at Tarlee SA

<b>Objective</b>	<ul style="list-style-type: none"> <li>Evaluate bio equivalence of fertiliser products on an N responsive site, in wheat cv. Emu Rock.</li> <li>Compare two rates of each fertiliser product in terms of yield and quality benefits.</li> </ul>
<b>Details</b>	<ul style="list-style-type: none"> <li>Independent trial by Peracto, each treatment was randomly replicated four times.</li> <li>Compare various fertiliser applications in terms of grain yield and quality of wheat including LawrieCo Seeding Program and Soluble Humates with Urea applications</li> <li>2013 growing season had above average rainfall May – Sept. Despite a dry spring, yields were above the average for the district</li> </ul>
<b>Timing</b>	<ul style="list-style-type: none"> <li>Seed treatment applied as seed dressing one day prior to sowing on 17 May 13.</li> <li>GreenSeeker assessment taken on 28 Jun 13 at crop stage BBCH21.</li> <li>Broadcast application of fertiliser treatments on 02 Aug 13 at crop stage BBCH 32.</li> <li>Crop vigour / phytotoxicity assessment on 11 Sep 13 at crop growth stage BBCH 63.</li> <li>Crop harvested on 14 Nov 13 at crop stage BBCH 99.</li> </ul>
<b>Key Yield and Grain Quality Outcomes</b>	<ul style="list-style-type: none"> <li>Highest average yield of 5309kg/ha Soluble Humates and Urea 100 kg/ha (Treatment C). This represented a 2.5% increase above the comparative Treatment A. Additionally Treatment C showed a 0.7% reduction in screenings and 0.6% increase in mean protein.</li> <li>Comparison of 50 kg/ha Urea (Treatment B) to Urea with BioMAX Soluble Humates (Treatment D) also showed a reduction in screenings of 1.75% and increase in mean protein of 0.3%.</li> </ul>
<b>Return on Investment</b>	<p>The outcomes support a positive return on investment of applying Urea with humic (in the form of BioMAX Soluble Humate Granule).</p> <ul style="list-style-type: none"> <li>Increased Yield (up to 2.5%)</li> <li>Reduced Screening of grain (0.7%-1.75%)</li> <li>Higher Mean Protein in grain (0.3%-0.6%)</li> </ul>



### Trial Site at Tarlee SA



### Treatments

	Sowing	In Crop (Broadcast)	Crop Vigour (mean % compared to control no. 15)	Grain Yield (mean kg/ha)	Grain Protein (mean %)	Screenings (mean %)
A	DAP 80 kg/ha	Urea 100 kg/ha	99	5179	10.5	5.67
B	DAP 80 kg/ha	Urea 50 kg/ha	95	5201	9.4	6.60
C	DAP 80 kg/ha	Urea + BioMAX Soluble Humate 100 kg/ha	100	5309	11.1	4.98
D	DAP 80 kg/ha	Urea + BioMAX Soluble Humate 50 kg/ha	95	5201	9.7	4.85
E	LawrieCo Seed program# SureCrop V + NutriMAX	Urea 100 kg/ha	100	5287	11.0	5.02
F	DAP 80 kg/ha	nil	78	4654	9.1	6.31

# LawrieCo program included: SureCROP VAM seed treatment 10 L/T Seed and NutriMAX granular fertiliser at 100 kg/ha.

### Chronology of events

Date	Days after application (DAA)	Crop stage	Event
16 May 13	-78DAA		Application of seed treatment 13
17 May 13	-77DAA	BBCH 00	Crop sown
28 Jun 13	-35DAA	BBCH 21	GreenSeeker assessment
02 Aug 13	0DAA	BBCH 32	Application of post emergent treatments 1-14
27 Aug 13	25DAA	BBCH 49	Crop vigour and phytotoxicity assessment
11 Sep 13	40DAA	BBCH 63	GreenSeeker assessment
14 Nov 13	104DAA	BBCH 99	Crop harvested Grain yield and quality assessed