

Seed Treatment Trial

2017

Trial Overview

Hi-Tech Ag Nutrition programs cover a wide range of aspects to help bolster early crop growth and vigour, which in turn can lead to an increase in yield and grain quality. Seed treatments have long played an integral role in Hi-Tech Ag Nutrition programs. This trial looks at the value of using seed dressings in broadacre cereal crops by comparing the Hi-Tech Ag Full Treatment* program with and without seed treatments.

Seed Dressing Application

- Seed Gro Plus applied at 5 L per tonne of grain
- VAM Ultra applied at 100 grams per tonne of grain (200,000 propagules of Mycorrhizae /tonne)

*Full Treatment

- Seed dressing
- Granular Fert + liquid injection at seeding
- 1 x top Dress GS21 USC
- 1 x foliar GS30
- 1 x foliar GS40

Seed dressing was applied on grain within 10 days of planting.

Fertiliser Programs included varying granule fertiliser, liquid injection, granule and foliar nitrogen as well as trace element applications.

Results

	FULL TREATMENT	MINUS SEED TREATMENT	DIFFERENCE
ESPERANCE	4.25t/ha	4.02t/ha	0.23t/ha
WILLIAMS	2.28t/ha	1.98t/ha	0.3t/ha
HART	3.02t/ha	2.83t/ha	0.19t/ha

Seed Dressing Trial

Yield

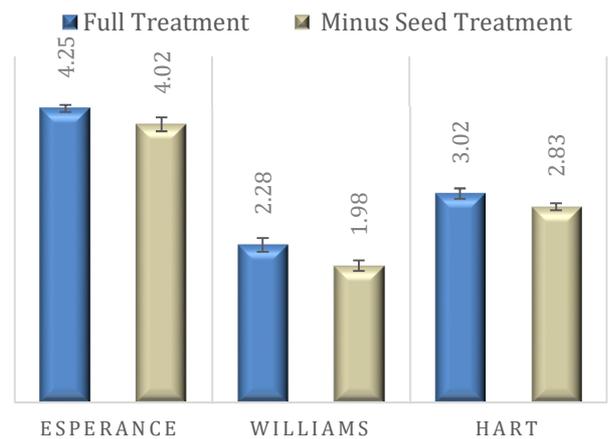
Hi-Tech Ag Seed Dressing showed statistically significant increases compared to the unapplied seed. The seed dressing treatment resulted in an average increase of 240 kg/ha compared to untreated seed across three locations. With a minimum yield of 190 kg/ha and a maximum of 300 kg/ha.

Cost Analysis

The Hi-Tech Ag Seed dressing treatment cost \$110 /t of seed. The seeding rate was 70 kg/ha at a cost of \$7.70 /ha. This returned an average of 240 kg more yield per hectare at an average wheat price of \$250 /t, thus the return on investment was \$60 /ha or \$7.70 return for each dollar spent.



EFFECT OF SEED TREATMENT ON YIELD IN HTA NUTRITION PROGRAMS



Discussion

It is worthy of note that Hi-Tech Ag nutrition seed dressing programs budget on long term sustainability and improving soil biology, soil organic matter and grain quality. This is achieved through inoculation of biology and building bigger root systems that are able to access more nutrient and water, resulting in greater yields when applied.

Note: All trials were conducted by independent contractors and data was collated and statistically reviewed by Agronomy Solutions