"2013 Syngenta Barley Fungicide & Plant Growth Regulator Trial – Conmurra,SA"

Contact, Jason Sabeeney, Contact Number, 0408 082894 Email address Jason.sabeeney@syngenta.com

Key Outcomes:

- The fungicides Amistar Xtra and Cogito in this trial significantly reduced foliar disease levels providing significant yield increases in barley.
- The addition of Moddus Evo plant growth regulator provided a small incremental improvement on yield to the fungicides alone.
- The experimental in-furrow fungicide SYNSIF1 was not able to deliver disease control and hence yield improvements in this trial because foliar disease appeared after the useful residual of the product had been exhausted.

Trial Objectives:

To assess the yield of the plant growth regulator (PGR), Moddus Evo and foliar fungicides Amistar Xtra, Cogito and experimental in furrow fungicide SYNSIF1 when used in barley. Previous work has shown that when combining PGRs with good quality fungicides yield and return on investment can be significantly enhanced in cereal crops grown in high rainfall environments. The aim of this trial was to explore these affects in more detail.

Trial Duration: Harvested

Location: Conmurra, SA
Soil Type: Heavy clay over limestone
Paddock History: 2012: Broad Beans

Farmer Co-operator:
The Seears Family,
"Boonderoo"

April –Oct Rainfall: 556mm

Treatments:

All trials were sown with small plot equipment and managed as per usual agronomic treatment. Grain yield was determined by machine harvest.

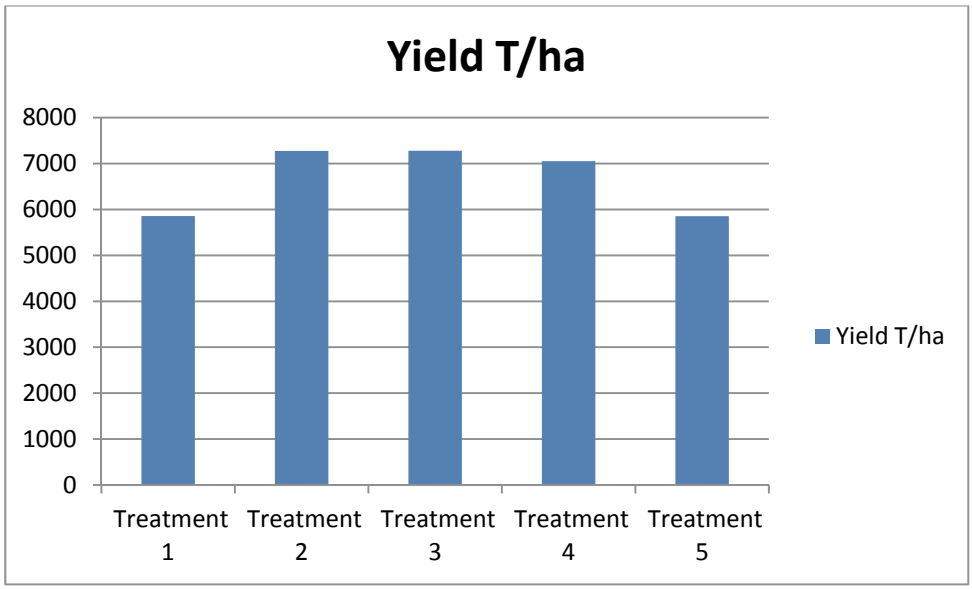
Table 1.
Treatments and treatment timings

Conmurra Syngenta Barley	
Treatment	kg/ha
Treatment 1	5855
Treatment 2	7276
Treatment 3	7279
Treatment 4	7052
Treatment 5	5852
l.s.d.	551.2
cv%	6.8
average	6663

Treatment 1 UTC
Treatment 2 Moddus Evo 400ml/ha@GS31 + Cogito 250ml/ha@GS31/33, followed by AmistarXtra 400ml/ha@GS39
Treatment 3 Moddus Evo 400mla/ha@GS31, followed by Moddus 200ml/ha@GS37/39 + Cogito 250ml/ha@GS31/33, followed by AmistarXtra 400ml/ha @ GS39
Treatment 4 Cogito 250ml/ha @ GS31/33, followed by Amistar Xtra 400mls/ha@GS39
Treatment 5 Vibrance (seed tmt) + SYNSIF1 (fert)

Results:

Chart 1.



Comments:

Moddus Evo is not currently registered for use at the time of this trial and was used under the APVMA trial permit - PER13408. Moddus Evo is expected to be registered in late 2014 in time for the 2015 season and will initially be registered for anti-lodging in wheat, barley and oats. It is important for best results with either of these products to get application timing right and to not apply under stress conditions. Please consult with your agronomist if intending to use either or both of these products this season.

SYNSIF1 is an experimental product developed by Syngenta which is not currently registered for use, but expected to be registered by the APVMA during late 2014 in time for the 2015 season. It will initially be registered for the control of rhizoctonia, pythium and early season foliar diseases in wheat and barley.

Conclusion and into the paddock

Whilst Moddus Evo will be an excellent new tool to help growers manage lodging and head loss in wheat barley and oats, more work needs to be done to fully understand how each variety interacts with Moddus Evo combined with various agronomic practices to ensure consistent yield improvements can be realised.

Amistar Xtra continues to be a very valuable fungicide offering best in class preventative disease control. Cogito fungicide has also proven to be a very effective fungicide in managing many cereal diseases cost effectively. Both products in this trial significantly reduced foliar disease levels providing significant yield increases in barley.

To date experimental SYNSIF1 has proven to be a very effective in- furrow fungicide in many trials around Australia for managing rhizoctonia, pythium and early season foliar foliar diseases in cereals. The results in this trial were influenced by the fact disease development was late in the development stage of the crop and well past the useful activity period of the in-furrow fungicide.

This trial has demonstrated that the use of the fungicides Amistra Xtra and Cogito combined with Moddus Evo plant growth regulator, can significantly increase yields and provide outstanding returns on investment in a high rainfall environment when cereal diseases and lodging are a problem.

Acknowledgements

Syngenta would like to thank the MacKillop Farm Management Group for their co-operation in setting up and managing this trial.