

Seed & Nutritional Technology Development PGP Programme

Quarterly Report Summary July – September 2014

Good progress is being made on all projects with milestones progressing towards their desired outcomes.

The Biological Seed Additive (BSA) continues to perform at least as well as existing chemical products in our autumn sown pasture trials. Our results confirm increases in dry matter production over bare seed and the existing chemical product at sites with drought and disease stress. The development of BSA as a viable seed treatment continues to show promising results, with good compatibility with existing chemicals in the commercial seed treatment and acceptable storage levels after six months storage.

Commercially viable transmission and storage levels of our new endophyte have been achieved. The nucleus seed crop has come through the winter in good condition and is on track to be harvested in the first quarter of 2015. All of our insect testing, regional trialling and livestock grazing experiments have yielded good results.

We have confirmed the strong agronomic performance of our new brassica hybrid at several regional trial sites. This strong performance combined with good disease resistance and improved water use efficiency (+38%) continues to support the commercial potential of this hybrid. The nucleus crop has come through winter well and is on track to be harvested in autumn 2015.



See photo above: Perennial ryegrass with new endophyte performing between rows of perennial ryegrass with AR37 endophyte or no endophyte (nil).

Outcomes to date:

- Strong progress on the glasshouse trials and BSA storage results as an effective seed treatment.
- Good performance of BSA in field situations where there is disease pressure or drought stress
- Established the first nucleus seed crop for two products.
- Demonstration of the improved water-use efficiency of our new hybrid brassica
- Demonstration of 100% resistance to 3 infectious strains of clubroot in our new brassica hybrid