

QUARTERLY PROGRESS SUMMARY: January – March 2015

A New Vision for Pastoral Agriculture through Seed and Nutritional Technology Development

Summary of progress during this quarter

- Good progress is being made on all projects, with milestones progressing towards their desired outcomes.
- Perennial ryegrass data from autumn and spring sown trials continue to show significant increases in DM/ha for our current BSA treatment (by 30-34% for autumn sowings and by 21% for spring sowings) compared to that produced by the bare seed. New BSA strains have been identified that offer improved performance and the research focus for 2015 is on understanding the effect of each component and on combining the most effective strains. All indications to date are that BSA can be successfully delivered via a seed coating using PGW Seeds current commercial polymer at a price which is economically acceptable.
- Sheep grazed on the AR-X animal safety trials have continued to show no adverse animal health problems, with high productivity over a summer which produced toxic effects in sheep grazing the standard endophyte control. A new nucleus ryegrass crop with AR-X endophyte was sown in March 2015. If the expected seed yield is attained, we are planning to deliver the originally scheduled commercial quantities of seed from multiplication of our tetraploid perennial ryegrass cultivar.
- Our new brassica hybrid nucleus crop has been harvested and we are now in the seed production phase. This new brassica has shown improved water-use efficiency and resistance to three infectious strains of clubroot. Delivery of a herbicide tolerant kale is ahead of schedule and we are increasing seed for further testing

Key highlights and achievements

- Progress on the development of BSA as a commercial seed treatment with good storage results and good compatibility with other components of current commercial seed treatment. BSA has shown good performance in situations where there is disease pressure or drought stress with DM yield increases. BSA has improved seedling establishment in 50% of trials and a significant DM improvement in a third of all pasture trials.
- The replacement nucleus seed crop for AR-X endophyte with improved bioactivity has been sown.
- Demonstration of the improved water-use efficiency, clubroot resistance (100%), and improved agronomic performance of our new hybrid brassica across a range of regional sites.
- The first nucleus seed crop for our new brassica hybrid has been successfully harvested.

Upcoming

- Seed coating experiments with the existing and several new strains will begin on selected lines.
- The first assay for AR X endophyte viability of ambient storage trials will take place in June 2015.
- Results from the new brassica animal grazing trials will be analysed and reported on.

Investment

Investment period	Industry contribution	MPI contribution	Total investment
During this Quarter	\$302,656	\$232,864	\$535,520
Programme To Date	\$3,480,952	\$2,419,155	\$5,900,107