

QUARTERLY PROGRESS SUMMARY: October – December 2015

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

Summary of progress during this quarter

- The nucleus multiplication of our tetraploid perennial ryegrass with AR-X endophyte has progressed well and will be ready for harvest in late-January 2016.
- New endophyte bioassays have been completed and animal grazing trials are showing positive animal growth rates with no decline in animal health.
- We have achieved excellent progress on traits that should improve feed conversion efficiency and reduce nitrogen emissions.
- Our new hybrid brassica seed increase have progressed well and will be harvested in mid-January 2016.
- Ten regional agronomic evaluation trials of our new hybrid brassica were established throughout New Zealand in a number of challenging environments.



Above: Supplementary feed crop demonstration paddock showing palatability difference under lamb grazing.

Key highlights and achievements

- The replacement nucleus seed crop has been sown for our perennial ryegrass with AR-X endophyte that has improved bioactivity. This elite selection has shown excellent agronomic performance, outperforming more than 100 other entries across 8 locations in New Zealand. The animal safety trials have shown strong animal performance without any adverse animal health problems.
- Demonstration of the improved water-use efficiency (+38%), clubroot resistance (100%), and improved agronomic performance of our new hybrid brassica across a range of regional sites.
- The first seed increase for our new brassica hybrid has been successfully harvested and a nucleus increase has been sown in Canterbury.
- HT-C Kale is proving tolerant to Telar herbicide and is now being increased for agronomic evaluation.
- The first assay for AR X endophyte viability in ambient storage trials took place in July 2015.

Upcoming

- The level of secondary metabolites in our improved feed conversion efficiency project will be known.
- Our new brassica hybrid seed crop is set for seed harvest in late-January 2016.

Investment

Investment period	Industry contribution	MPI contribution	Total investment
During this Quarter	\$311,643	\$285,777	\$597,420
Programme To Date	\$3,681,160	\$3,417,358	\$7,098,517