

## Seed and Nutritional Technology Development PGP Programme

### Quarterly Report Summary October - December 2014

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

The Biological Seed Additive (BSA) research continues to show variable results but with increased yield at sites that suffer from disease stress. BSA when applied as a seed treatment, to aid plant establishment, is compatible with commercial products applied by PGW Seeds to ryegrass and cereals, retaining viability after six months storage in ambient conditions.

The initial selection containing our new endophyte that was entered for nucleus seed production has been withdrawn due to the persistence of this selection not meeting commercial criteria. This will only cause a slight delay in commercialisation as two further selections have proven to have excellent persistence under grazing, strong dry matter yields and tolerance to a range of insect pests. Furthermore a group of new selections for improved grass grub tolerance have been developed for regional evaluation.

Our new brassica hybrid selection remains on track for commercialisation given its strong agronomic performance in regional trials, improved water-use efficiency, and its excellent clubroot tolerance. The nucleus seed crop is on track for harvest in the first quarter of 2015.

We have also made excellent progress on developing new commercially useful genetic variation in a range of brassicas.



(Above) Improved root growth in ryegrass containing our novel endophyte (L) vs nil (R) under grass grub larval feeding. Photo courtesy of AgResearch.

(Below) Roots of ryegrass susceptible (L) and resistant (R) to root aphid. The white wax is a characteristic of root aphid damage. Photo courtesy of AgResearch

