

## QUARTERLY PROGRESS SUMMARY: January – March 2015

### Pioneering to Precision – Application of Fertiliser in Hill Country.

The process of updating the algorithms with the data (including soil, plant samples and hyperspectral data) from the intensive 2014 spring sampling across four farms has been nearly completed. Pasture nutrient maps for nutrients such as Nitrogen, Phosphorus and Potassium have been produced across the four farms. The results relating pasture nutrient levels to sensing data continue to be encouraging.

Planning for the upcoming 2015 autumn sampling has been completed. There are three farms to be sampled this period. The sampling is expected to be completed in May.

Ravensdown continues to make very good progress on testing its generation two technology enabling more precise aerial fertiliser applications to hill country. The aircraft has been operating for over twelve months and is proving reliable. This system enables a prescription map to be loaded into the aircraft and inform the fertiliser application. This process was completed on a farming operation in February and the results from the application showcased at a recent field day at Limestone Downs, Port Waikato.

#### Key highlights and achievements

- Pasture nutrient algorithms updated with the large dataset from the spring sampling programme across 4 farms.
- Appointment of post doc position at Massey University. This position is focused on developing sound methods and knowledge of data acquisition while collecting site specific hyperspectral imagery.
- Results from the differential fertiliser application showcased at a field day at Limestone Downs, Port Waikato.

#### Collaboration with other PGP programmes.

- The fifth research farm for the Ravensdown PGP programme has been selected. This farm is also a focus farm within the Farm IQ PGP programme.

#### Upcoming

- Planning for the 2015 autumn sampling has been completed. There are three farms to be sampled this period. The sampling is expected to be completed in May.
- Finalisation of the 2015/16 programme work plan and the adoption strategy for the programme.

#### Investment

<i>Investment period</i>	<i>Industry contribution</i>	<i>MPI contribution</i>	<i>Total investment</i>
<i>During this Quarter</i>	\$0.04m	\$0.04m	\$0.08m
<i>Programme To Date</i>	\$1.5m	\$1.5m	\$3m