Ravensdown PGP Programme Quarterly Progress Report

Contract reporting period: Jan-Mar 2019

PSG Meeting Date: 10/5/19

Prepared by: Mike White, Technical Development Manager

Updated: 31 May 2019 Printed: 31 May 2019

Summary of progress during this quarter

Analysis of the spring 2019 validation remote sensing surveys was completed and the second season of autumn validation surveys commenced during this quarter. The purpose of validation surveys are to test the robustness of remote sensing soil fertility predictions against physical soil tests. The programme has now placed an emphasis on finalising the optimum sensing conditions to ensure the best alignment between soil fertility estimates from remote sensing to physical soil tests and evaluating the robustness of calibrations across years. Additional nutrients to phosphorus have been analysed in further detail with two additional analytes continuing to look promising.

An inaugural meeting of farmers involved in the North Island focus farms took place in Masterton during the quarter. The group endorsed their belief that remote sensing of soil fertility will be a major advancement for the sheep and beef industry. Very Informative feedback from the group on options for adoption of the programme which will be invaluable as the programme moves towards commercialisation.

Fertiliser applications using leading edge variable rate equipped aircraft (IntellispreadTM) continues to grow with fertiliser applied using this technology applied to over 94,249 hectares of NZ hill country. This includes 5 variable rate nutrient applications using variable rate equipped aircraft based on fertiliser plans developed directly from hyperspectral remote sensing information. The aerial applications from remote sensing data starting 2 years ago are a world first and illustrates how the programme and NZ agriculture are working at the foremost of these technological developments.

Key highlights and achievements

- Completion of the analysis of spring 2018 validation remote sensing surveys.
- Meeting of all the North Island focus farmers.

Upcoming

- Completion of the autumn 19 validation remote sensing survey programmes.
- Selection of final farm for inclusion into the focus farm network bringing the total farms in the focus farm network to seven.
- Finalisation of the programmes 2019/20 annual plan.

Investment

Investment period	Industry contribution	MPI contribution	Total investment
During this Quarter	\$0.15m	\$0.13m	\$0.28m
 Programme To Date	\$4.67m	\$4.63m	\$9.3m