Ravensdown PGP Programme Quarterly Progress Report

Contract reporting period: January - March 2016

PSG Meeting Date: 6/05/16

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Summary of progress during this quarter

Quarter 3 of the 2015/16 year involved planning for the upcoming autumn sampling across the four most recently added research farms in the programme. These farms are located in the Wairarapa, Nelson, Canterbury and Otago regions. Research farms provide the baseline data to develop remote sensing calibrations. The programme now has eight research farms representing a range of geographical areas across New Zealand.

To date approximately 6216 soil and 6015 plant tissue samples have been collected. This represents the most comprehensive dataset taken in New Zealand for the purpose of developing remote sensing technology to improve the identification of nutrient requirements across NZ hill country. Results relating pasture nutrient levels to sensing data continue to suggest very robust algorithms are achievable. The relationships with underlying soil fertility is now the current focus of the programme.

The first two focus farms, Patitapu Farming Co LTD (2500 ha) in the Wairarapa and Atihau Whanganui INC - Ohorea Station (4000ha) have been established in the programme. Planning is underway for a third farm to enter the programme in the 16/17 year. The focus farm's purpose are to trial and refine tools that are developed as part of the PGP programme. A series of workshops are currently underway with the aim of increasing farmer and industry group's awareness and understanding of the value proposition for adopting new precision fertiliser application technology.

Ravensdown continues to make very good progress on its generation two technology IntellispreadTM enabling more precise aerial fertiliser applications to hill country. This system enables a prescription map to be loaded into the aircraft and the map drives the opening of the planes hopper with the aim to deliver the prescribed amount of nutrients to different parts of the farm. These aircraft have now been employed on both focus farms applying the 2015/16 season fertiliser requirements.

Key highlights and achievements

 Application of 2015/16 fertiliser requirements on the programmes' two current focus farms through the Intellispread™ system.

Upcoming

- Completion of autumn data collection across four most recent research farms.
- Focus farm events for Patitapu Farming Co LTD and a shared workshop with a FarmIQ event.

Investment

Investment period	Industry contribution	MPI contribution	Total investment
During this Quarter	\$0.08m	\$0.08m	\$0.16m
Programme To Date	\$2.43m	\$2.43m	\$4.86m