# **Ravensdown PGP Programme Quarterly Progress Report**

**Contract reporting period: Jan- March 2020** 

#### PSG Meeting Date: 28/4/20

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# Summary of progress during this quarter

Unfortunately, further testing of the remote sensing algorithms planned for Autumn 2020 was disrupted by the advent of Covid-19 in New Zealand. The testing of the algorithms required field work which could not be carried out over the lockdown period. The programme is currently considering if this field work can be carried over until Spring 2020 thereby providing the opportunity for critical independent testing of the fitness of purpose of the algorithms to be completed.

Despite the delay caused by Covid-19, the programme has made encouraging progress aimed at improving current atmospheric corrections techniques employed in its airborne remote sensing algorithms. It is expected that improvement in these techniques will ultimately lead to improved estimations of soil fertility.

The programme has also continued to make good progress in the streamlining of its decision support software. It is anticipated that this streamlining will bring substantial improvements to processing times for delivering spatial fertiliser plans. This is critical for commercial deployment, as the programme also continues to narrow down the appropriate mix of commercial service offerings that could be offered from mid-2020 on.

Fertiliser applications using leading edge variable rate equipped aircraft (Intellispread<sup>™</sup>) continues to grow with fertiliser applied using this technology applied to over 148,350 hectares of NZ hill country. This includes 6 variable rate nutrient applications using variable rate equipped aircraft based on fertiliser plans developed directly from hyperspectral remote sensing information.

# Key highlights and achievements

- Encouraging progress on improving current atmospheric corrections techniques which are expected to further improve soil fertility estimates.
- Ongoing streamlining of the programmes decision support software which is on track to deliver significant savings in processing timing.

### Upcoming

- Planning of the Spring 2020 validation programme.
- Finalisation and testing of atmospheric correction techniques.

### Investment

Investment period	Industry contribution	MPI contribution	Total investment
During this Quarter	\$0.03m	\$0.03m	\$0.06m
Programme To Date	\$5.27m	\$5.15m	\$10.42m