

Sustainable Vegetable Systems

Beyond promotion to toe dipping

Potatoes NZ Agronomy Summit

August 2026

Andrew Barber – Agrilink NZ

Horticultural Industry Approach



2026 Nutrient Code of Practice

The Code of Practice provides a practical, risk-based approach to managing nutrients.

The associated nutrient management plan workbook is designed to make the process of planning and recording as efficient as possible.



Code of Practice



Workbook

Topics being covered

1. The Sustainable Vegetable System Tool – Overview
2. Does the SVS Tool work? – potato case study
3. What next?



SVS Tool – A Decision Support Tool

Prior Crop **Current Crop** Next Crop

Crop Grown

Crop type:

Crop:

Variety:

Basic Crop Info

Planting date:

Growing days:

Crop finish date:

Yield unit:

Target yield:

Established population:

Additional Crop Info

Established stage:

Harvest stage:

Paddock loss (%):

Moisture content (%):

3 simple inputs:

1. Crop type
2. Planting and harvest date
3. Target yield



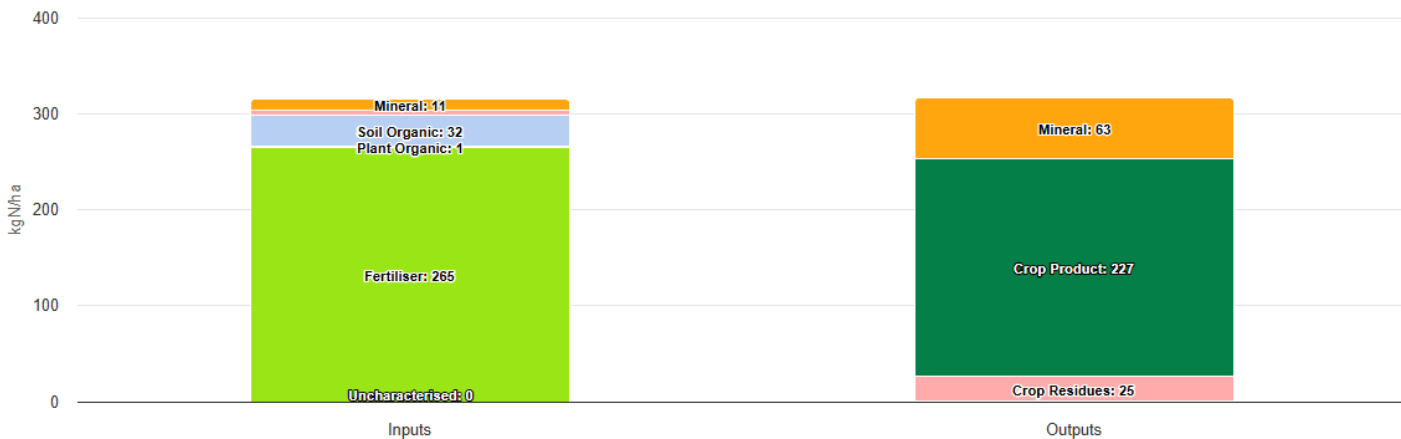
N budget - Standard

N fertiliser total:

265

(kgN/ha)

Current Crop Nitrogen Balance



Nitrogen Schedule

Final Fertiliser Date (Optional):

02/02/2026

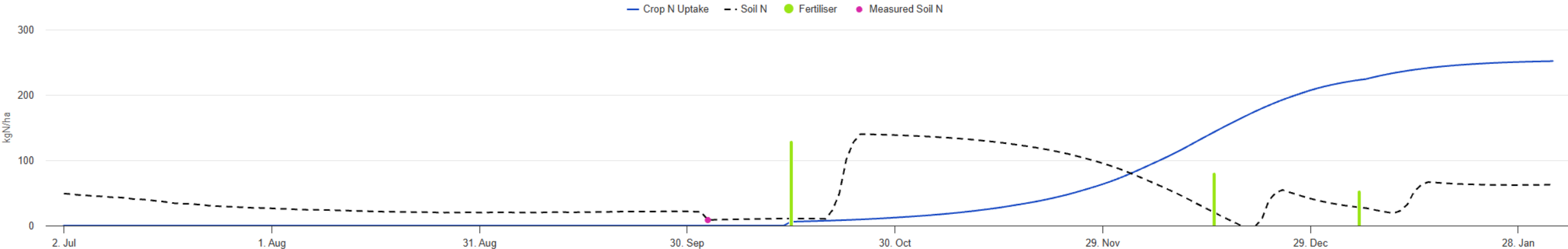
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Date	Amount (kgN/ha)	
15/10/2025	130	
15/12/2025	81	
05/01/2026	54	

● Planned/Applied ● Guidance

Current Crop N Uptake and Soil N

Displays patterns of Crop N uptake and soil mineral N content during the current crops growth period. The tool recommends an N application whenever soil N drops to 30kg/ha and aims to leave this much N in the soil when the crop is harvested.



N budget – SVS Tool

N fertiliser total:

222
(kgN/ha)

Nitrogen Schedule

Final Fertiliser Date (Optional):

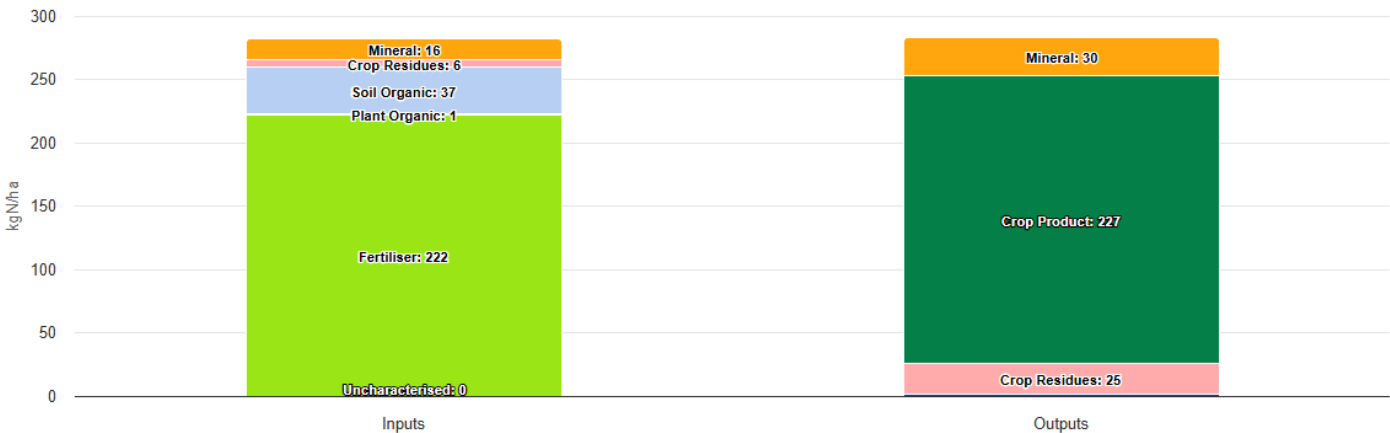
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Date	Amount (kgN/ha)	
15/10/2025	67	
20/11/2025	80	
02/12/2025	75	

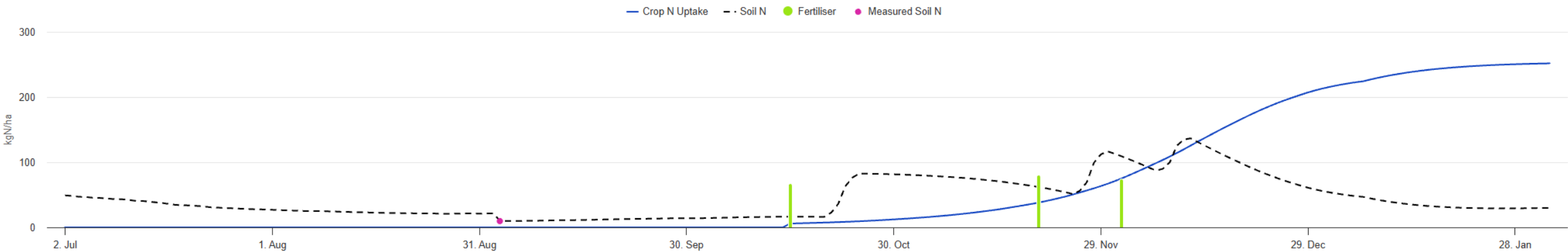
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Current Crop Nitrogen Balance



Current Crop N Uptake and Soil N

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Round table discussions

- Standard fertiliser N of 265 kgN
- SVS Tool guidance of 222 kgN
- Discussion on:
 - Soil mineralisation – 30 to 40 kgN
 - Fertiliser timing – particularly at planting / canopy closure
 - N levels during the season
 - Mineral N at the end
 - 60 kgN vs 30 kgN

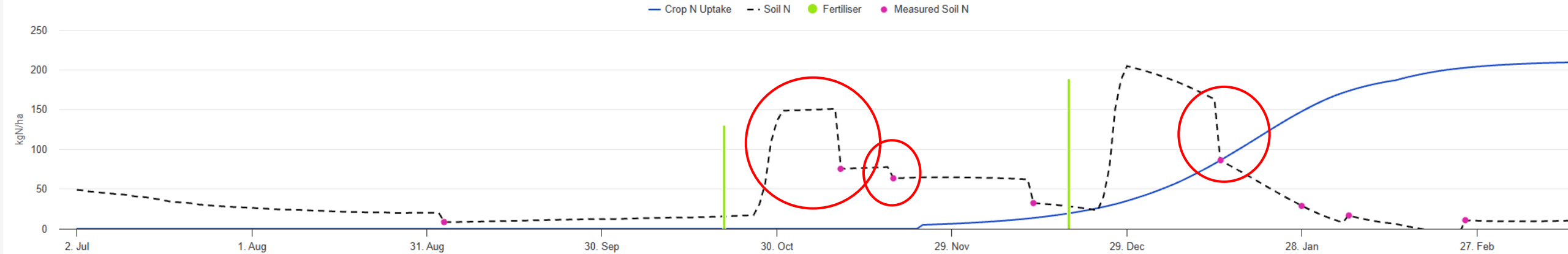


Fast forward – What actually happened

Standard practice

Current Crop N Uptake and Soil N

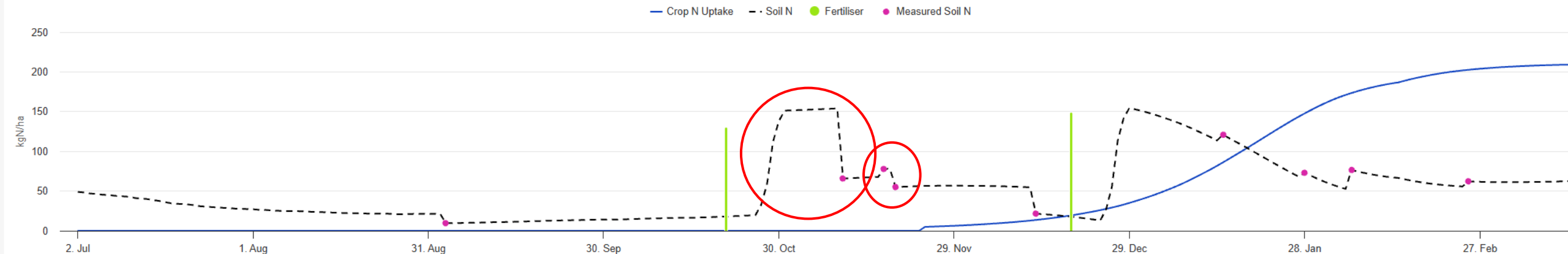
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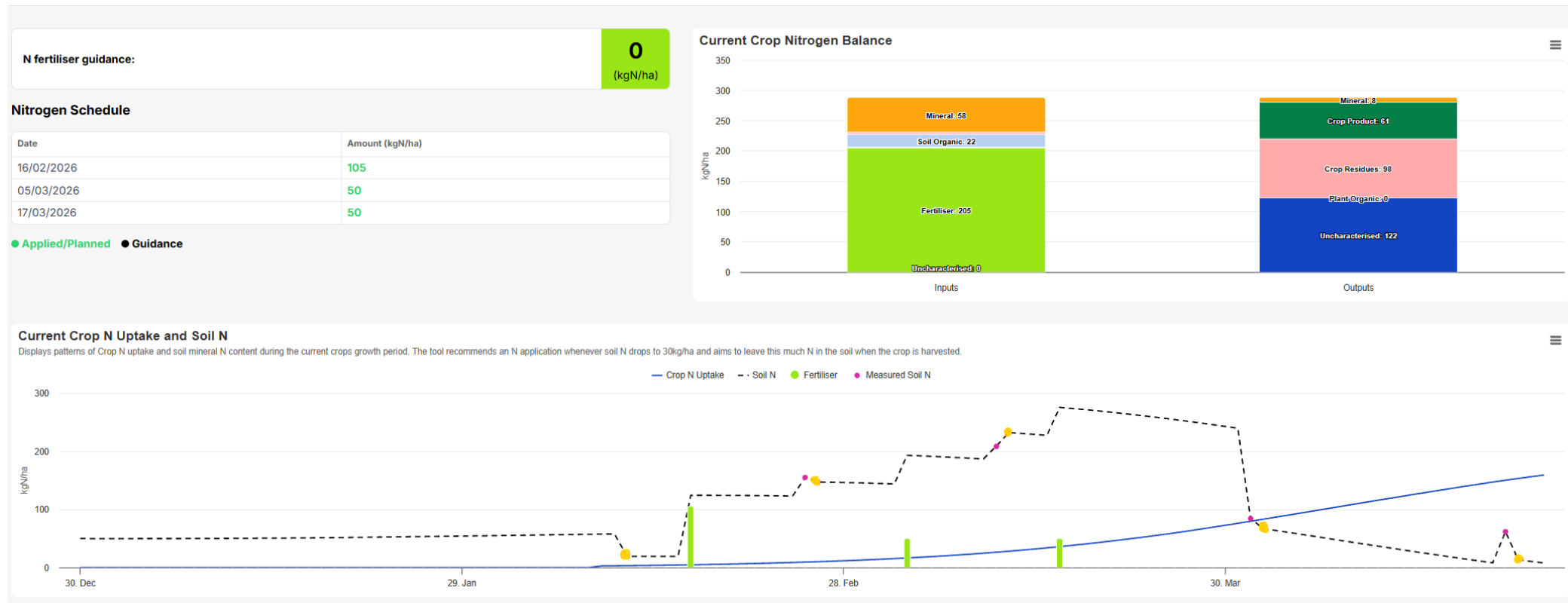
SVS Tool - Support

Current Crop N Uptake and Soil N

Displays patterns of Crop N uptake and soil mineral N content during the current crops growth period. The tool recommends an N application whenever soil N drops to 30kg/ha and aims to leave this much N in the soil when the crop is harvested.



Lab vs Quick N tests



Gold dot – Lab. test
Purple dot – Quick N test

Within +/- 20 kg N
Except for the last one – 50 kgN different



Pukekohe Pilot

- Model changes:
 - Adding rules for scheduling N at planting
 - Scheduling rules between planting and harvest
 - Canopy cover constraints to fertiliser application
 - Need to account for changing N conc. of the crop as it develops



Pukekohe Pilot

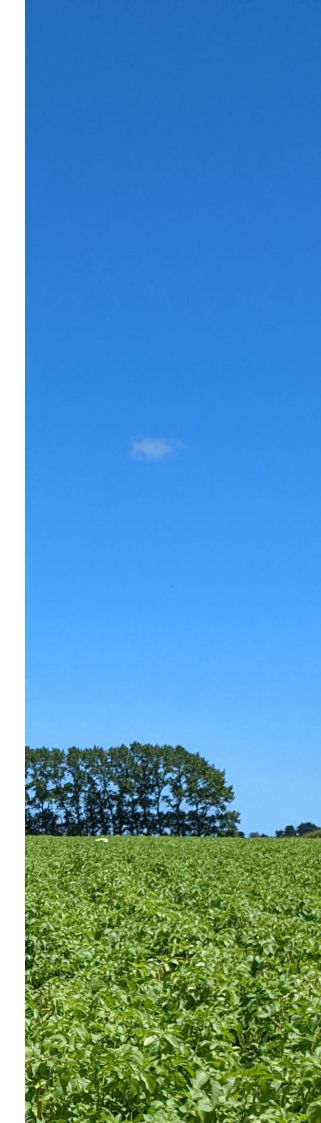
- Interface changes:
 - The method for entering and editing soil test
 - Ability to share an enterprise
 - Drag and drop crops in the management screen
 - Moving all fertiliser inputs to the right hand side and editable

It is a grower centric tool that will continue to be improved through feedback.



SVS Workshops

- Pukekohe – Daniel Sutton (027 4732 381)
- Horowhenua – Sarah Dobson (021 177 8173)
- Gisborne – Dereck Ferguson (027 807 4575)
- Hawke's Bay – Dereck Ferguson (027 807 4575)
- Canterbury – Paula Lleras (027 263 8427) & Roger Blyth (021 742 006)



Workshop Series

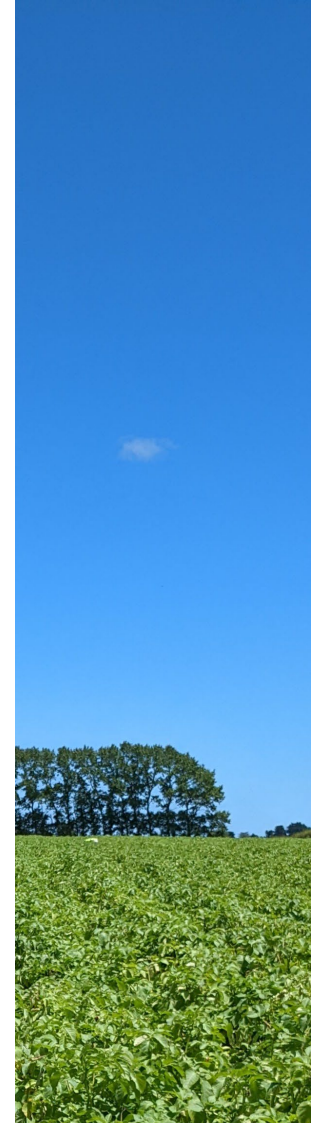
LEARN > APPLY > REVIEW > IMPROVE + PLAN

One – Getting started with SVS

Two – Applying SVS to your crops

Three – Review and learnings from the season

Four – Planning for next season



One take away (plus a few sub points)

1. Dip your toe in the water

www.svstool.co.nz



i. Enter 2 crops

ii. Track 1 crop – soil N tests. Both mineralisable N & mineral N.

Sit around the table and discuss

Get involved in the regional extension workshops





EMPOWERING
SUSTAINABLE
GROWTH.