
Roger Blyth
Seed and Field Rakaia

Knowns and unknowns

The vector and Lso - GDD/ stages/ sensory?/ distance?/ gut contents
Sources of Lso – seed and environment - titre levels/ variety and vigour
Thresholds and monitoring??
Beneficials – IPM tech / P and F/ Lincoln Uni
Chemical control of TPP and beneficials – CPLI and IPM tech

Controls

Volunteer potatoes and other hosts – MH use
Nature strips
Plan your planting – yield performance –unplanted areas?
Planning to mitigate crop stress – ethylene!!
Seed size, timing and quality
Irrigation and nutrition planning – bulking rate
Panning
Row end management - roadways - headlands
Tramlines
Variety and growing days
Mesh covers
Chemistry and its application

The costs – get TPP in perspective

Potato growing per hectare $20-25k

TPP programme $500-1500/ha

Yield is king so concentrate on that!!

TPP programme cost

50t/ha $30/t
75t/ha $20/t

1% ZC on 75t/ha is 0.75t/ha yield @ ?$/t

Not the same in table BUT tuber quality still a major

The challenge is Lso not TPP

No way of stopping an adult landing and feeding – beneficials work on nymphs mainly

Acquisiton and deposition of the bacteria is quick

Do they land on sick plants – ethylene – weak cell walls – easy feeding - acquire virus?

BUT would you lay eggs on a dying plant

Move to healthy host - lay 500-1000 hot eggs

The only way to get control is to prevent in field population explosions

Must control eggs and nymphs in crop

We know insecticides have follow through effects

All about controlling populations and controlling stress

Good row end management and no tramlines

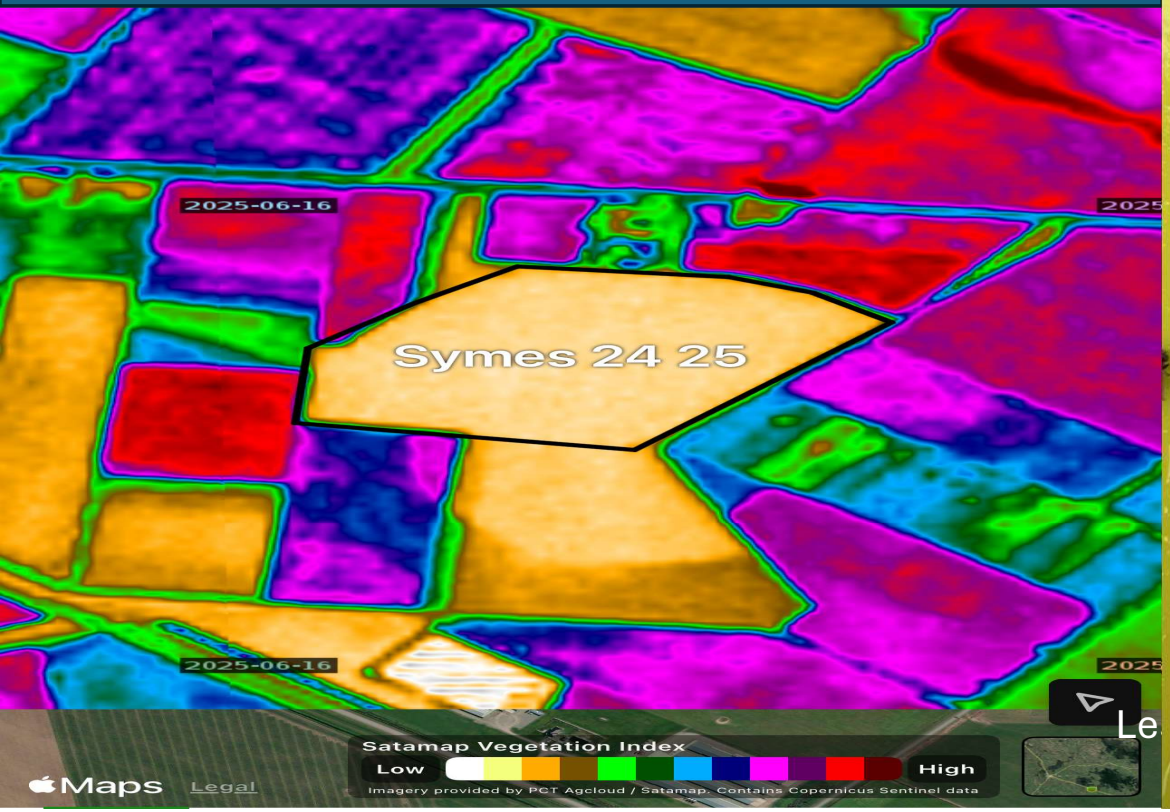
Measure what you can to help make decisions

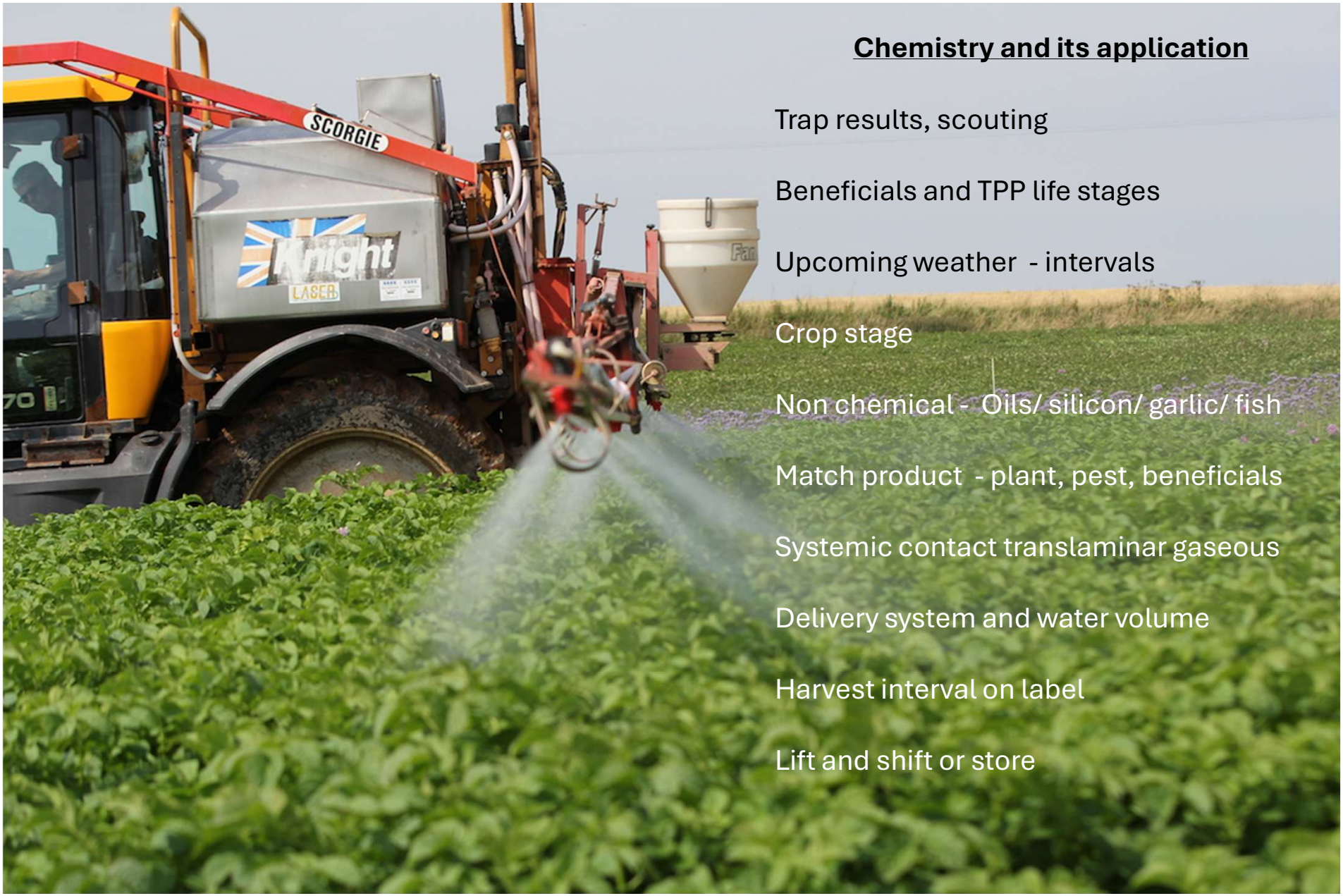
Irrigation and nutrition planning

Plan planting to mitigate stress areas

Seed size/ timing and quality

Variety and growing days in relation to Geography
Irrigation frequency and or availability etc
Nutrition – canopy architecture





Chemistry and its application

Trap results, scouting

Beneficials and TPP life stages

Upcoming weather - intervals

Crop stage

Non chemical - Oils/ silicon/ garlic/ fish

Match product - plant, pest, beneficials

Systemic contact translaminar gaseous

Delivery system and water volume

Harvest interval on label

Lift and shift or store

Drone applied Reglone 1l/ha in 50l/ha water

Processing Agria near Darfield

0.9% ZC so far on delivery over 400 tons

DIRECTIONS FOR USE:
MIXING: Pour **Movento OD** directly into the spray tank with agitators running.

RESISTANCE MANAGEMENT Group 23 Insecticide

Movento OD belongs to Mode of Action Group 23 (lipid synthesis inhibitors). Resistance to this insecticide could develop in some situations from repeated use. To minimize this risk, use strictly in accordance with label instructions. Do not apply more than 3 applications per season.

RECOMMENDATION:

Crop	Pest	Product Rates	Comments
Potatoes	Tomato/Potato psyllid Aphid	560mL/ha.	Make two applications early in the season at 7 day intervals as part of a programme, in sufficient water to ensure good coverage of all foliage. If large numbers of adult tomato/potato psyllid are present, add a knockdown insecticide.
Field Tomatoes	Tomato/Potato psyllid	560mL/ha	Make two applications early in the season at 7 day intervals as part of a programme, in sufficient water to ensure good coverage of all foliage. If large numbers of adult tomato/potato psyllid are present, add a knockdown insecticide

GENERAL INFORMATION
AVID® is not systemic, therefore thorough coverage is essential. After application, AVID® quickly moves into young leaves from where it is taken up by the feeding Leafrollers, Mites and Tomato-Potato Psyllid. AVID® takes about 7 days to achieve maximum control.
Note: DO NOT apply if rainfall is expected before spray would have dried, as reduced efficacy may result. DO NOT overhead irrigate within 24 hours after application.
Crop monitoring: For effective Mite control, regularly monitor crops every 3 to 5 days during the season. For effective Leafroller and Tomato-Potato Psyllid control, regularly monitor crops during the season.

RESISTANCE MANAGEMENT GROUP 6 INSECTICIDE

Resistance management

Blocking of products

Spray volume ml per plant???

Air assistance?

Spreaders/ droplet size

Angled jets

Dye nights