Users' guide for potatoes



MOVENTO

Controlling silverleaf whitefly with Movento® and Confidor® Guard

Movento 240 SC Insecticide is a powerful, innovative insecticide for the control of sucking pests in a range of vegetable crops, including potatoes.

The first Group 23 insecticide available in Australia, **Movento** is effective on many pest populations which may have developed resistance to insecticides from existing activity groups.

Movento has unique '2-way systemicity'. After penetrating into plant tissue, it becomes highly mobile in sap flows both up and down through the plant, so hidden pests can be controlled.

Application

Importantly, the introduction of **Movento** makes available an additional insecticide mode of action within potato crops. Foliar in-field spraying of **Movento** following an at-planting in-furrow application of **Confidor Guard** (Group 4A) is a highly effective strategy for lasting protection against silverleaf whitefly.

Movento needs a suitable adjuvant to help it move through the plant's epidermal layers into the leaf tissue and penetrant-type adjuvants (e.g. Hasten®, Agridex®) have proven very effective. In some situations, organosilicone adjuvants (e.g. Pulse®) or non-ionic wetting agent type adjuvants have also been effective.

Movento takes 7–10 days or more after application to reach peak activity. Once it has done so, **Movento** has



demonstrated a very long residual effect, even against very difficult to control pests. Do not re-apply **Movento** within 7 days of a previous application.

IPM Fit

"Soft" on most beneficial species when used as directed, **Movento** has minimal impact compared to broad-spectrum alternatives. **Movento** is generally highly compatible with IPM production systems, but may have an adverse effect on predatory mites.

Movento is safe to bees when used as directed and can be applied to flowering potato crops. In line with good agricultural practice, however, direct application to foraging bees should be avoided.

For management of insecticide resistance, **Movento** should not be applied more than 3 times per crop. For full resistance management guidelines, visit **www.croplifeaustralia.org.au**

MOVENTO IN POTATO CROPS AT A GLANCE

Pests	Silverleaf whitefly (Bemisia tabaci Biotype B).
Target stage	Movento is active on juvenile stages rather than adults.
Rate	300-400 mL/ha + adjuvant
Spray interval	Generally 7–14 days, depending on pest pressure. Do not re-apply Movento within 7 days of a previous Movento spray.
Maximum sprays	3 per crop
Adjuvant(s)	1. Penetrant-type adjuvants e.g Hasten or Agridex at 0.5–1 L/ha 2. Organosilicone adjuvants e.g. Pulse at label rates (generally >100 mL/100 L) 3. Non-ionic wetting agent type adjuvants e.g. Agral® or BS1000 at label rates
Coverage	Thorough coverage is necessary.
Compatibility	Do not apply with products containing chlorothalonil (e.g. Bravo®, Walabi®) if oil-based adjuvants are used. Movento is compatible with Antracol® 700 WP, Dithane® Rainshield, Rovral® and Walabi.
WHP	7 days
Threshold	Time spray(s) assuming that at least 7 days will be necessary before the full effect is evident. If pest numbers are beginning to escalate rapidly, apply early rather than late.



The most effective strategy for controlling silverleaf whitefly is applying Confidor Guard in-furrow at planting, followed by foliar sprays of Movento from about 8 weeks after planting, or when adult whiteflies are first detected.

AT PLANTING Confidor Guard (in-furrow application)

Pest	Silverleaf whitefly (Bemisia tabaci Biotype B)
Rate	14 mL/100 metres of row, mix with water using 1.5–3.0 litres of spray mixture per 100 m of row.
Application	Furrow spray at planting – apply as part of the planting process to the open furrow as a narrow spray band (100–150 mm wide) centred in the plant row at seed level.

For more detailed information, please consult Confidor Guard – users' guide for potatoes, available from your local Bayer CropScience representative.

FROM ABOUT 6-9 WEEKS Movento (foliar spray applications)



Confidor®

Where Confidor Guard is applied as a furrow spray at planting, spray **Movento** just before this treatment runs out. Generally, this occurs between 6 and 9 weeks after planting, depending on the soil type and pest pressure. Start monitoring for pest activity from around 6 weeks after soil application to determine the optimum time to start spraying **Movento**. An example of timing in potato crops is shown below. Apply **Movento** when adult whiteflies are first detected, as it works best on young insects and needs some time to move in the sap flow and reach peak activity against juvenile pest stages. In situations where high pest pressure occurs, or is expected, more effective and longer residual control may be achieved with 2 sequential applications of **Movento**.

Timing of Movento sprays after Confidor Guard applied as an at-planting in-furrow spray in potatoes.									
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Pre- emergence	Rosette stage	Stem extension	Rapid canopy growth		Tuber initiation	Tuber bulking		Senescence	Harvest
	Confidor Guard								
			← Actively monitor from around 6 weeks and allow time for Movento to reach full effectiveness →						
			Movento (Maximum of 3 sprays)						

PEST CONT	ROLLED	Movento Application		
Silverleaf whitefly - nymphs	Movento best controls juvenile whitefly (nymphs) which feed on treated plant sap. It also reduces the number and viability	Rate	Example of re-spray interval	
	of eggs laid by adult female whitefly. Apply Movento when adult whitefly numbers first reach local thresholds, and before nymphs start to colonise plants. Movento acts faster than the Insect Growth Regulator products (IGRs) but does not provide rapid knockdown of adult whiteflies. If continual migration of whiteflies is a concern, start with an insecticide which acts against adult stages.	300–400 mL/ha + adjuvant	7–14 days	

Disclaimer. Always consult the product label for detailed information. The information and recommendations set out in this brochure are based on tests and data believed to be reliable at the time of publication. Results may vary, as the use and application of the products is beyond our control and may be subject to climatic, geographical or biological variables, and/or developed resistance. Any product referred to in this brochure must be used strictly as directed, and in accordance with all instructions appearing on the label for that product and in other applicable reference material. So far as it is lawfully able to do so, Bayer CropScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions.

