

Key facts about BELT® & MOVENTO®

BELT is a powerful insecticide which is 'soft' on most beneficial species and pollinators, but is extremely effective on key lepidopteran pests when used as directed. Highly active, it is very fast-acting and has a very long residual effect.

MOVENTO brings a unique advantage to the control of sucking insect pests. Moving through the plant in two directions instead of just one, it protects the underside of leaves and other parts of the plant that conventional products never reach.

TARGET PESTS

Lepidoptera (larvae of moths), chewing insects.

Sucking insects (sap feeders), e.g. aphids, whitefly, thrips.

EFFECT ON BENEFICIAL SPECIES

Low impact to almost all, including parasitic wasps, beneficial beetles and bugs, hoverfly, lacewings and predatory mites.

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EFFECT ON BEES

Safe to bees and beehives when used according to good agricultural practice.

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MODE OF ENTRY INTO PEST ORGANISM

Ingested when plant tissues (e.g. leaves, flowers, fruit) are eaten by grubs. Very little contact activity.

Ingested when sap feeders suck up plant sap. Very little contact activity.

SPEED OF EFFECT

Super-fast. Feeding stops almost immediately after first dose. Feeding damage stops as soon as the insect ingests the active ingredient in BELT, flubendiamide.

Slow. Takes time to penetrate into leaf tissue, then into plant sap flow, then into the insect's gut, then into the insect's lipid production systems. Then it takes time for the shortage of lipids in the insect's body to become a fatal shortage. Often 7-10 days or more for full effect.

TARGET ZONE

BELT needs to be retained either ON or INSIDE the plant tissue on which the grubs will feed.

Movento MUST get into sap flows before it is possible to be taken up by sucking insects. If Movento does not penetrate into leaf tissue, it will not be effective against insects.

BARRIERS TO PERFORMANCE

BELT is fully effective in mixtures with many other insecticides, fungicides and nutritional additives. Penetrant and/or super-spreader adjuvants may be required if moths lay eggs on the underside of leaves (so that translaminar action needs to be enhanced) or if the crop is extremely hard to wet (e.g. many brassica crops).

1. Nil or inappropriate adjuvants reduce performance.
2. Heavy deposits of dust, suspension concentrate and powder sprays and fertiliser can create barriers to penetration of Movento into the plants, thus compromising efficacy.
3. Penetration and translocation of Movento is inhibited if plants are severely stressed.

CROP SAFETY

Generally very safe to registered crops in most mixtures. Safe with copper fungicide mixtures.

Do NOT use with Du-Wett®, Amistar®, Amistar Top. Do not use in tank-mixtures with chlorothalonil-based products if emulsified oil adjuvants are used.

USING ADJUVANTS WITH BELT AND MOVENTO

Adjuvants are always helpful, but not always essential for effective use of BELT.

They improve the coverage (i.e. spreading), adhesion, and penetration you can achieve, which is an advantage in all crops and necessary on hard-to-wet crops like brassicas.

Adjuvants are critical to help MOVENTO penetrate leaf tissue.

The most effective adjuvants are the penetrant types with emulsified oils (e.g. Agridex® and Hasten®), with the organosilicones next best. Non-ionic wetters do add to performance, but not to the same level as penetrant-type adjuvants.

	PRODUCT	DESCRIPTION/ACTION	OK with BELT?	OK with MOVENTO?
EMULSIFIED CROP OILS (CROP OIL CONCENTRATES) Primarily penetrants, the adjuvants in this group assist with the penetration of BELT and Movento directly through leaf epidermis into the middle of leaf tissue. Penetrants assist Movento to move into plant sap flow, and assists with the translaminar activity of BELT, which is important when eggs are laid on lower leaf surfaces. These adjuvants improve rainfastness.	Agridex	emulsified paraffinic oil	✓✓✓✓✓	✓✓✓✓✓
	Hasten	ethoxylated canola oil	✓✓✓✓✓	✓✓✓✓✓
	Kwickin®	esterified canola oil	✓✓✓✓✓	✓✓✓✓✓
	Uptake®	methoxylated canola oil	✓✓✓✓	✓✓✓✓
	Rocket®	methoxylated canola oil	✓✓✓✓	✓✓✓✓
	Synertrol®	ethoxylated vegetable oil	✓✓✓	✓✓✓
	Protec® Plus	emulsified vegetable oil	✓✓	✓✓
	Codacide®	vegetable oil	✓	✓
ORGANOSILICONES Most organosilicones are penetrants and also have an enhanced capability to assist spreading of spray deposits ("super-spreaders"). Those that contain other components (polymers and latex) which are intended to aid in droplet deposition, such as Du-Wett and Designer, are less suitable for use with Movento.	Maxx	organosilicone adjuvant penetrant and 'super spreader'	✓✓✓✓✓	✓✓✓✓✓
	Du-Wett*	organosilicone-based 'super spreader', aids deposition	✓✓✓	Do NOT use
	Designer	organosilicone + latex polymer sticker, aids deposition	✓✓✓	✓
NON-IONIC WETTERS Non-ionic wetting agents help improve the spreading and sticking behaviour of spray droplets. As penetrants they are much less effective than emulsified oil adjuvants or the organosilicones, although they can still be highly effective with BELT. To achieve any penetrating effect for Movento, spray volumes need to be relatively higher than with the true penetrant-type adjuvants.	Agral®	non-ionic wetter	✓✓✓	✓
	BS1000	non-ionic wetter	✓✓✓	✓
	Nufarm Activator®	non-ionic wetter	✓✓✓	✓
	Chemwet 1000	non-ionic wetter	✓✓✓	✓
BUFFERING (OR ACIDIFYING) AGENTS	LI 700	buffering agent, some aid to penetration	✓✓✓	✓
	Liaise	buffering agent, reduction of spray "fines" drift	?	No effect
	Amm. sulphate	buffering agent, reduction of spray "fines" drift	?	No effect
CROP OILS	Sacao Biopest® oil	"fast break" emulsion high grade paraffinic oil	✓✓✓	✓✓✓ (mango, citrus)

Note: The information on this material is intended as a guide to choose the most effective adjuvants for use with BELT and MOVENTO. However, this in no way implies that the use of the adjuvants should contradict the directions on the adjuvant label in any way. * Risk of crop damage. Phytotoxicity noted in trials with Du-Wett mixtures in some crops.

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

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