

USER GUIDE

Movento 100SC

For effective control
of Mealybugs in grapes



MOVENTO® 100SC

2-way systemic pest control: Putting an end to hide and seek!

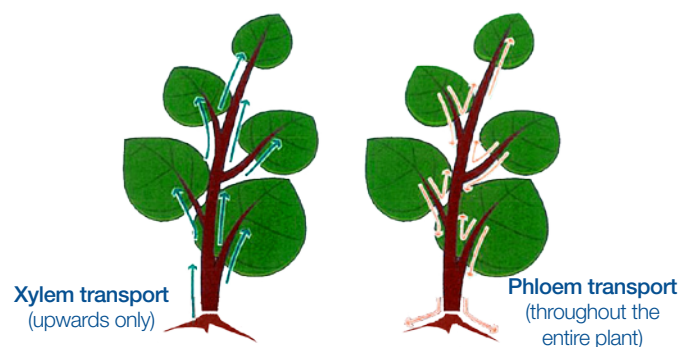
With increasing numbers appearing in New Zealand vineyards, controlling mealybugs is vital as they are an important vector of Grape Leaf Roll Virus (GLRV). Mealybugs are sucking pests that feed directly from the phloem tissue in plants. As GLRV is present in the phloem, the mealybugs can be infected and transmit the virus when feeding on uninfected vines. Mealybugs are difficult to control on grapevines as they are hidden pests (found under bark, in crevices, on the undersides of leaves and in bunches), being difficult to directly target with insecticides.

Movento 100SC provides a new tool for grape growers in their mealybug and virus management programmes. Movento belongs to a new class of insecticides (the Ketoenols), with its unique mode of action and 2-way systemicity it provides excellent control of sucking pests, including mealybugs. Movento's 2-way systemicity means it moves both upwards in the xylem and downwards in the phloem of the plant, which makes it very effective in controlling phloem feeding pests like mealybugs. The 2-way systemicity property



Symptoms of Grape Leaf Roll Virus

means Movento moves throughout the entire plant (including into roots). This ensures control of mealybugs, even in areas not readily accessible by spray application, which is where they are typically found.



New 2-way systemicity distributes the active ingredient throughout the entire plant

Movento - mode of action

Movento has a unique mode of action as a lipid biosynthesis inhibitor. It is primarily active through ingestion against the developmental stages of sucking pests. It has no knockdown of adults but affects female fecundity by reducing the number and the viability of eggs produced.

Movento and the environment

Movento 100SC is compatible with IPM systems, being harmless or only slightly harmful to common beneficials. Movento 100SC has a high level of safety to bees and does not affect bee brood, colony condition or foraging activity. Movento 100SC has a favourable eco-toxicological profile. The product is rapidly degraded in soils and has a low leaching potential. It is not toxic to birds, earthworms and soil organisms and is of low - moderate toxicity to aquatic organisms.

USE RECOMMENDATIONS

Use rate

150 ml/100 L of water. Minimum 750 ml/ha.

Water Rate

Recommended water rate is 500 L/ha based on standard 2.9 metre row spacing. Do not use a water rate that will result in run off.

Concentrate Spraying

If using lower than 500 L/ha water rates adjust the Movento 100SC rate accordingly. For example if using 300 L water per ha use 250 ml of Movento 100SC per 100 L = 750 ml/ha of Movento 100SC. Do not use a water rate lower than 300 L/ha when applying Movento 100SC to grapes.

Row Spacing

Calculation re different row widths:

NZ trials with Movento 100SC were conducted on 2.9 m row spacing – rate is 750 ml/ha.

If your row spacing is closer than 2.9 m, increase the rate of Movento 100SC accordingly.

E.g. if your row spacing is 2.4 m the calculation is: $2.9/2.4 \text{ m} = 1.2$. Multiply the Movento rate per/ha by $1.2 = 1.2 \times 750 = 906 \text{ ml/ha}$.

Compatibility

The following mixes are compatible and crop safe when using Movento 100SC on grapes:

- ✓ Movento 100SC + Kumulus + Dithane Rainshield
- ✓ Movento 100SC + Kocide Opti
- ✓ Movento 100SC + Systhane EW
- ✓ Movento 100SC + Nando
- ✓ Movento 100SC + Cabrio
- ✓ Movento 100SC + Quintec
- ✓ Movento 100SC + Talendo

Do not mix foliar fertilisers or add adjuvants with Movento 100SC.

Spray Coverage

- Uptake of Movento takes place through the leaves, not the bark
- Spray coverage should be targeted at the leaves
- High volume applications onto vine cordons and trunks are not recommended

Weather Conditions

Movento requires uptake into the leaves and translocation around the plant. Ideally apply Movento in warm humid conditions to actively growing plants.

Do not apply Movento:

- to plants under stress
- in drought conditions
- in unseasonably cold or hot conditions

Adjuvants

Movento 100SC is an "all in one" formulation, in that it is pre-adjuvanted. The Movento 100SC has an in built adjuvant system that optimises the uptake of Movento into the leaf. Additional adjuvants are not required or recommended to be used with Movento 100SC.

Water pH

Movento is stable between pH 3.5 – 7.5. Above 7.5 use pH buffers.

Rainfastness

2 hours under good drying conditions.

Withholding Period

Do not apply after the start of flowering.

Upon Storage

A characteristic of Movento 100SC is that after a period of storage the product can separate into two distinct layers in the container. This is of no concern (it is not sedimentation) and is easily reversed by shaking. Always shake the bottle before using Movento 100SC.

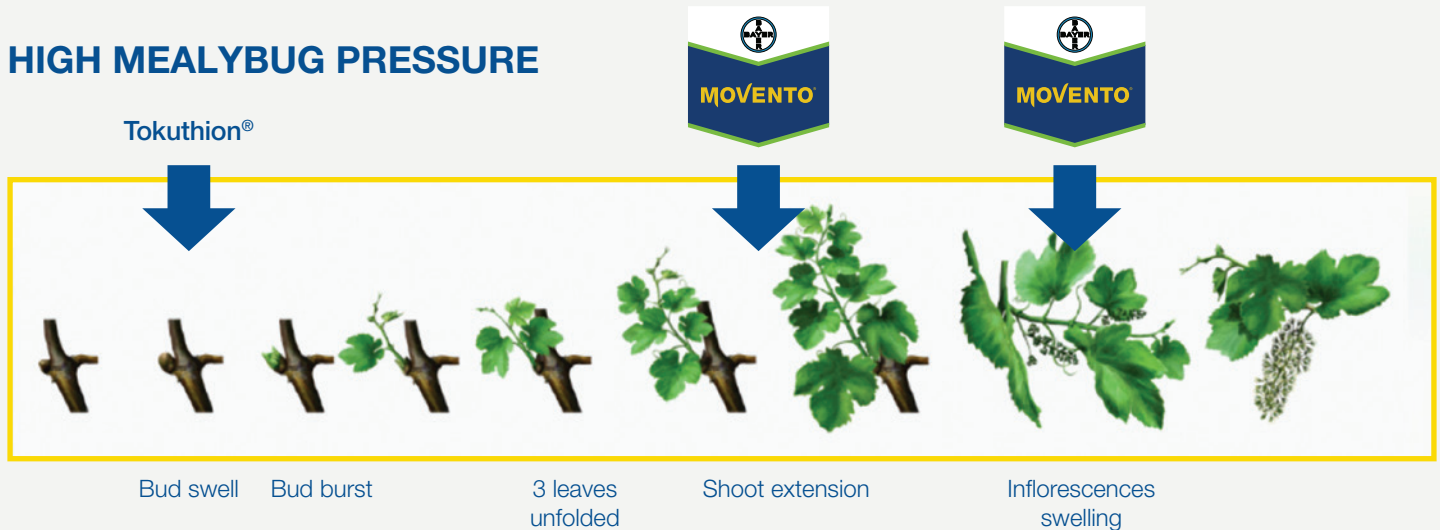
Mealybug Control Programmes

Good mealybug control now and in the future will rely on a programmed integrated approach:

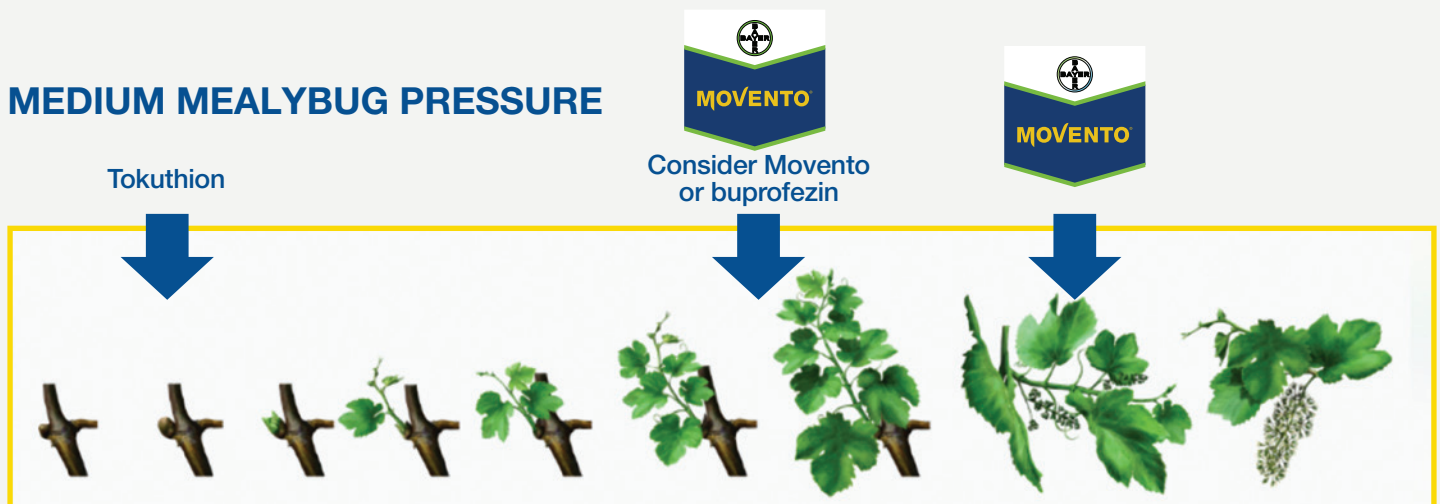
- Monitoring
- Multiple timings
- Different chemistries
- Cultural control (removal of host plants etc)

SPRAY RECOMMENDATIONS

HIGH MEALYBUG PRESSURE

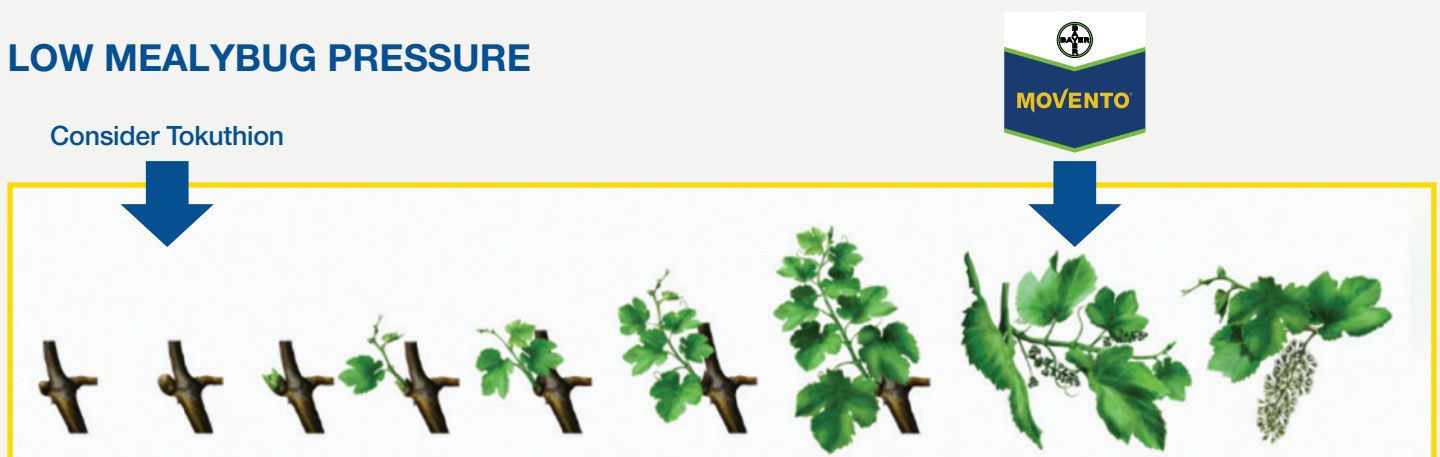


MEDIUM MEALYBUG PRESSURE



If using 1 Movento 100SC application - always target immediately pre-flowering.

LOW MEALYBUG PRESSURE



If using 1 Movento 100SC application - always target immediately pre-flowering.

MOVENTO 100SC: USE IN GRAPES AT A GLANCE

PEST	Mealybugs.
RATE	150 ml/100 L of water (minimum 750 ml/ha).
DILUTE WATER RATE	Use 500 L of water per ha (based on a 2.9 m row spacing). Do not use a water rate that will result in run off.
CONCENTRATE SPRAYING	If concentrate spraying adjust the use rate accordingly. E.g. if using 300 L of water/ha use 250 ml/100 L of water = 750 ml Movento 100SC/ha. Do not use a water rate less than 300 L/ha.
SPRAY TIMING	Make 2 applications. The first when the new seasons shoots are 20-50 cm long, the second just prior to flowering.
ADJUVANTS	None required.
RAINFASTNESS	2 hours under good drying conditions.
PRE-HARVEST INTERVAL	Do not apply after the start of flowering.
PACK SIZE	5 litre plastic bottle. AgRecovery compatible.
APPROVED HANDLER	Movento 100SC has no approved handler or tracking requirements.
CONTACT RE-ENTRY PERIOD	When fully dry. A minimum 2 hour waiting period is recommended.
STORAGE	Shake before use. Upon storage the Movento 100SC formulation may show phase separation (two distinct layers). This has no influence on application or efficacy and is easily reversed by shaking.

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Insist on Movento from Bayer.

www.cropscience.bayer.co.nz



Bayer CropScience

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