

Media Release

Friday, 25 October 2002



Feeding attractant boon for IPM strategies

A 63 percent increase in control of Light Brown Apple Moth on grapevines has been achieved with the tactical inclusion of a natural insect feeding attractant into integrated pest management (IPM) programs in the Coonawarra.

Results from a commercial trial in the region has significant implications for the viticulture sector, and has the potential to revitalise use of the biological Bt (*Bacillus thuringiensis*) insecticides and other IPM 'friendly' products.

The campaign for fruit quality and harvest yield is high on the agenda of Coonawarra vineyard manager Jamie Gray, Graymoor Estate, who is becoming increasingly focused on the ecological sustainability and operator health and safety benefits of IPM.

"More and more we are using Bt insecticides like Dipel instead of pyrethroids because of the lessened impact on the 'beneficials'," says Mr Gray.

"The Bt products only kill the pest insects and leave the beneficials – wasps, spiders and other predatory insects – unscathed.

"The IPM approach is more sustainable and safer in the long term, and there will be a time when we won't be able to use the other chemicals."

Mr Gray said if there was a possible shortfall to the Bt insecticides, it was they tended to be less effective than their synthesised counterparts. Many of the 'softer' IPM products require ingestion by feeding insect larvae to work effectively.

Situated on the outskirts of the Coonawarra township, the Graymoor Estate vineyard comprises 74 hectares of Cabernet Sauvignon and Chardonnay varieties. The Light Brown Apple Moth is of major concern to the region. Not only does it cause damage to berries, but exposes open wounds for Botrytis to form within the fruit.

In February, Mr Gray trialed Nufarm Mobait insecticide spray additive to increase the palatability – and overall performance – of Dipel sprayed for control of moth larvae.

Mobait is a technically different insect attractant distributed by Nufarm Australia Limited. The liquid product comprises a unique blend of natural food extracts that encourage feeding on sprayed leaves by insect larvae, which maximises the dose of insecticide being taken in.

As part of the commercial trial managed by local Wesfarmers Landmark agronomist, Megan Dixon, Mr Gray targeted feeding moth larvae with Dipel (250 g/ha) and Mobait (125 mL/100 L).

Ms Dixon monitored larvae activity on 20 test panels per row, on vine leaves and grape bunches, as well as counts of egg masses.

Mobait increased Dipel efficacy in vines by 63 percent – from 41 to 15 first/second larvae per panel – five days after treatment (Graph 1 on page 3). After 12 days, Mobait had increased insect control by 57pc.

In addition, the trial showed Mobait additive with Dipel provided complete control of the moth larvae in bunches, both five and 12 days after application (Graph 2 on page 3).

Ms Dixon also observed there was less cobwebbing in the both the tips and bunches, attributed to Mobait luring feeding larvae from areas sheltered from chemical application.

continued on page 2...

....from page 1

No impact on beneficial species was detected. Presence of parasitised egg masses on leaves indicated the activity of Trachygramma Wasp, and there were numerous lacewings and spiders post-spraying.

“Inclusion of the Mobait boosted the performance of the Dipel, no question. It encouraged the larvae to come out and feed more on the leaf area where the Bt chemical had been deposited,” Mr Gray said.

“We only used Mobait once because it was a new product, but we will be using it over a larger area this year, particularly on the Chardonnay block which traditionally has a fairly higher insect burden.”

At recent research and development training workshops in Victoria’s Yarra Valley, international adjuvant specialist Bob Reeves, Loveland Industries, US, said Mobait helped viticulture-specific insecticides work to their full technical capacity.

“Such performance helps grapegrowers profit through better quality bunches, reduced botrytis and higher returns,” Mr Reeves said.

“Importantly, Mobait has proven to be extremely effective in helping Bt technology to work more effectively - Bts are back for viticulture thanks to Nufarm’s Mobait!”

Mr Reeves said adjuvants had become more sophisticated and specialised. Mobait is an example of this, and is designed specifically for use on lepidopterous pests such as Light Brown Apple Moth.

“By imitating the high sugar and protein foods Light Brown Apple Moth larvae are attracted to, Mobait encourages ingestion of biological insecticides, assisting in the management of potential insecticide resistance issues with hard-to-kill insects.

“Nufarm’s Mobait is compatible with virtually all IPM formulations and is very effective on key pest insects problematic in vines. It is technically different and easy to use.”

Locally owned Nufarm, one of the world’s top 10 crop protection companies, has been providing innovative and superior research-based solutions to Australian agriculture for more than 40 years.

Nufarm is Australia’s leading adjuvant supplier, with more than 16 specialist adjuvant products available. Mobait is available from leading rural stores.

© *Mobait and Dipel are registered trade marks.*

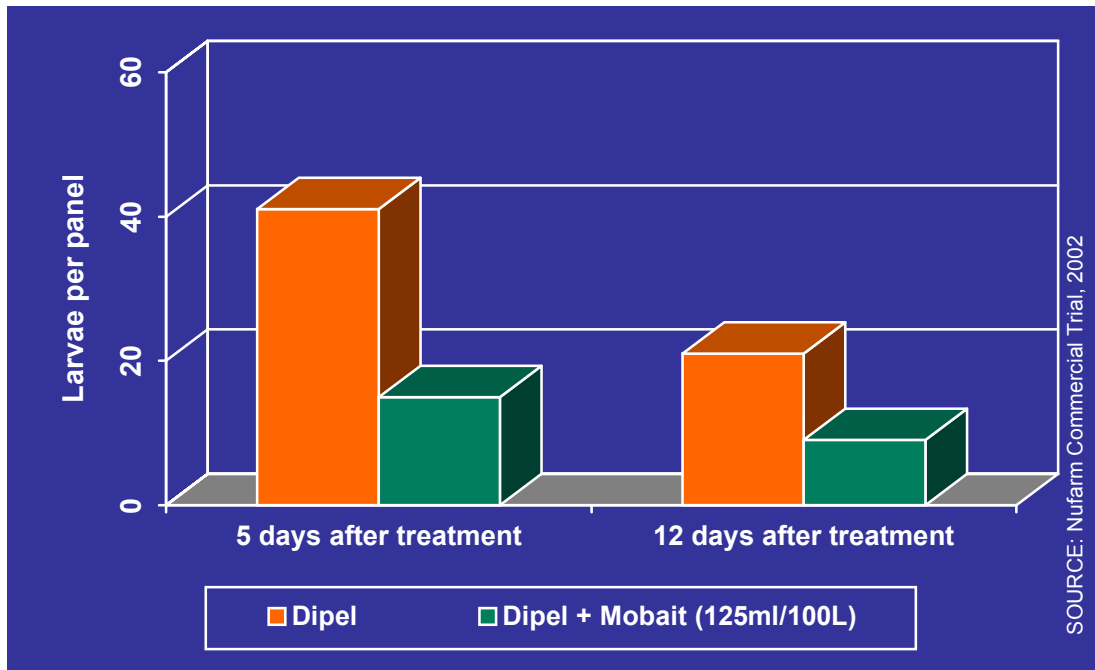
Further information:

Ed Bracey
Nufarm Australia Limited
Ph: 03 9292 1000
E-mail: ed.bracey@au.nufarm.com

continued on page 3...

...from page 2

Graph 1. Dipel control of Light Brown Apple Moth in vines.



Graph 2. Dipel control of Light Brown Apple Moth control in bunches

