# Media Release

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# Feeding attractant boon for IPM strategies

Tactical inclusion of a natural insect feeding attractant into lepidopterous pest spraying programs is increasing the efficacy of integrated pest management (IPM) strategies in Queensland's Lockyer Valley.

The campaign for quality-driven price premiums is high on the agenda of Gatton district vegetable grower Paul Windolf, who is becoming increasingly focused on the ecological and operator health benefits of IPM.

"We are moving more and more to using the 'softer' range of insecticides, in particular the Bt (*Bacillus thuringiensis*) products," says Mr Windolf, farm operations manager of the family-owned Windolf Farms, Upper Tent Hill.

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

"The IPM approach is more sustainable and safer. Making chemical handling easier and safer for operators is also important."

Windolf Farms consign produce along the eastern seaboard, primarily to the Brisbane, Sydney and Melbourne markets. Major crops grown on the 162-hectare property are lettuce, broccoli and washed potatoes. This year's favoured summer crop is seedless watermelon.

Mr Windolf 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 soft IPM products required ingestion by feeding insect larvae to work effectively.

Earlier this year Mr Windolf trialed Nufarm Mobait insecticide spray additive to boost the efficacy of Delfin and Xentari spraying for the control of Diamondback Moth, Cabbage White Butterfly and Heliothis in broccoli.

Mobait comprises a unique blend of natural food extracts that encourages feeding on sprayed leaves by insect larvae, which maximises the dose of insecticide being taken in. Distributed by Nufarm Australia Limited, Mobait is a liquid insect attractant that is technically different and easy to use.

Mr Windolf first sprayed the broccoli crop (week four) in March to target first and second instar larvae with Delfin (500 g/ha) and Mobait (100 mL/100 L) at a ground spray rate of 500 L/ha.

"The result was very good. We went in to check larvae activity three days after spraying, and the numbers were virtually non existent," said Mr Windolf.

Impressed with the mortality counts he applied further treatments of the Mobait spray additive (100 mL/ha) with Bt insecticide at two critical pest control points later in the season. Ground spray rate increased to 800 L/ha to match the surface area of the crop as it matured.

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"The broccoli crop was of excellent quality at harvest. It was basically clean, no spoilage. We were seeking better efficiency from the Bts, and the attractant certainly increased their potency by making the chemical more palatable to the grubs," he said.

The outstanding result achieved at Windolf Farms were consistent with extensive field trials in 2001 which showed Mobait consistently improved the performance of a wide range of insecticides. Mobait increased Dipel efficacy in cabbages by 20 percent (see Graph 1 on page 3).

Similar, replicated trials showed Mobait increased the speed of kill of Dipel in tomatoes by 34% - to 75% insect control – five days after treatment (see Graph 2 on page 3).

At recent research and development training workshops in the Kingaroy region, international adjuvant specialist Bob Reeves, Loveland Industries, United States, said Mobait lured the larvae of insect pests hiding in sheltered feeding sites such as in the heads of cabbage and lettuce. This helped to control entrenched larvae that are very difficult to control under normal conditions.

"Such performance helps growers to profit through better quality produce, reduced incidence of crop damage and higher returns."

Mr Reeves said while Mobait's proven in-crop performance was particularly appealing for growers utilising many of the IPM products, it also assisted with contact insecticides such as pyrethroids by encouraging the larvae to move to where the product has been applied.

"Mobait has excellent application advantages and superior bonding ability," Mr Reeves said.

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

Mr Reeves said adjuvants had become more sophisticated and specialised.

"Nufarm's Mobait is compatible with virtually all IPM formulations and is technically different and easy to use," he said. "It is very effective on key lepidopterous pest insects problematic in horticulture."

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.



***Further information:***

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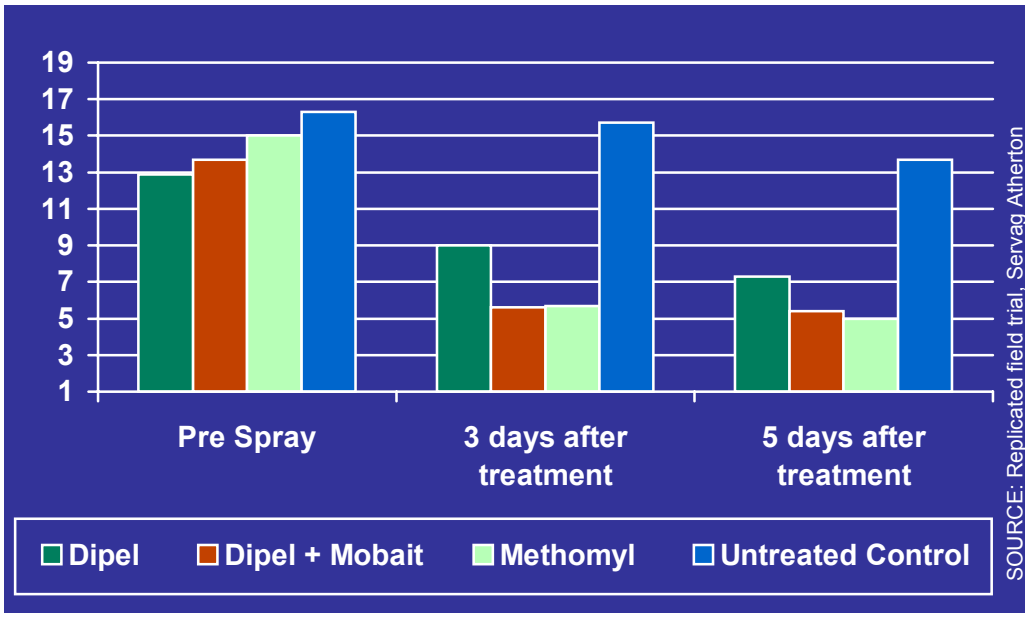
***Graph 1.*** *Dipel control of Heliothis in tomatoes (larvae per metre)*




***Graph 2.*** *Dipel control of Plutella in cabbages*