

READ DIRECTIONS BEFORE OPENING OR USING



# ISOMATE® Three NZ Leafroller

Effective against lightbrown apple moth (*Epiphyas postvittana*), green-headed leafroller (*Planotortrix octo*) and brown-headed leafroller (*Ctenopsuestis obliquana*)

## Mating Disruption Dispensers

### ACTIVE INGREDIENTS:

A mixture of acetate esters

Contents: 400 units

Manufactured by Shin-Etsu Chemical Co. Ltd, Tokyo, Japan

Distributed by Etec Crop Solutions Ltd, New Zealand

### Important user information for New Zealand:

**ISOMATE® Three NZ Leafroller dispensers** may be useful as an aid in the suppression of light brown moth (*Epiphyas postvittana*), the green headed leafroller (*Planotortrix octo*), and the brown headed leafroller (*Ctenopsuestis obliquana*) activity within pipfruit orchards.

THE PRODUCT HAS NOT YET BEEN FULLY TESTED IN NEW ZEALAND AND RESULTS MAY VARY FOR DIFFERENT LOCATIONS, OR FROM SEASON TO SEASON, OR BECAUSE OF OTHER FACTORS.

### FACTORS AFFECTING MATING DISRUPTION

**Block Size:** For maximum efficacy the area treated should exceed 2ha and square blocks are preferable to rectangular ones. Dispensers must be applied uniformly through the treated area (see rate information below) and are more effective in blocks of trees of uniform size and without missing trees.

**Shelter:** Pheromone concentrations are higher where shelter is present to reduce wind speed and air movement. Control may be compromised in windy or exposed situations and on slopes affected by air drainage.

**Population size:** Control using mating disruption will be more successful if damage in the previous season was low. Supplementary insecticidal control measures should be considered if information on population density is unavailable (consult your advisor).

**Isolation:** External sources of leafroller (e.g. unmanaged pipfruit) can provide a significant source of immigrant females. Risks from any such infested hosts within 50m of the treated block should be managed by treating adjacent fruit trees within this distance with an appropriate leafroller active insecticide.

For information as to proper use, contact Etec Crop Solutions (0800 100 325).



**HSNO Class: 6.5B.**

**KEEP OUT OF REACH OF CHILDREN**

**HEALTH WARNING: HARMFUL** – Skin Sensitizer. Avoid contact with the skin.

**PRODUCT DISPOSAL:** Ensure unwanted product is used by another grower strictly in accordance with label directions. Used ties may be dumped in an approved landfill.

**PACKAGING DISPOSAL:** Burn if permitted and circumstances, especially wind direction allow, otherwise bury in landfill.

**HANDLING PRECAUTIONS:** **Do not open foil packaging in enclosed areas. When applying, wear protective, impermeable gloves.** Do not rub eyes with gloved hands. Do not eat, drink or smoke while using. Wash hands and face before meals and after work.

**STORAGE:** Store in original packaging tightly closed in a refrigerator for short term storage or freezer for longer term storage.

**FIRST AID:** Treat symptomatically. If symptoms persist, take patient to a doctor immediately. For advice, contact the **NATIONAL POISONS CENTRE 0800 POISON (0800 764 766)** or a doctor immediately.

**APPLICATION OF DISPENSERS**

**When:** Dispensers should be applied as prescribed by a fruit export protocol if applicable, otherwise **EITHER** at the start of leafroller flight activity **OR in the case of apples**, immediately following the application of a 'petal-fall' insecticide in early November, in both North and South Island regions.

**Rate:** Use protective disposable gloves when applying dispensers. Dispensers should be applied at **600-1000 per hectare depending on pest pressure** and placed as high as possible in the tree canopy, ideally in the top 10-25% of the tree canopy. Loosely twist the dispensers onto branches allowing space for growth. Apply extra dispensers on trees adjacent to gaps (missing trees) to achieve a dispenser rate of 600-1000 per hectare.

**MONITORING**

**Pheromone traps:** These are the most cost-effective way of determining the effectiveness of mating disruption. High dose (10x concentrate) Desire® caps (lures) are required to monitor the activity of all three leafroller species, *Epiphyas postvittana*, *Planotortrix octo*, and *Ctenopsuestis obliquana* in the presence of pheromone dispensers. In most circumstances monitoring of *Epiphyas postvittana* alone using high dose caps is sufficient to determine the efficacy of the disruption system. At least one trap should be placed along each border of treated blocks at a height of 1.2-1.5m. Traps should be cleared weekly and the number of moths recorded.

**Bases and caps** Bases should be changed 3 weekly and Desire® pheromone lures 6 weekly.

**Insecticide treatments** Follow fruit export protocols and Integrated Fruit Production (IFP) guidelines for the application of insecticides.

**Exclusion of Liability:**

To the extent permitted by law, buyers and/or users of the goods accept that neither the manufacturer, Etec Crop Solutions Ltd as distributor, nor any other distributor have any liability or responsibility whatsoever for any loss, damage or injury whether in contract or tort, whether direct, indirect or consequential howsoever arising in connection with the supply of these goods.

HSNO Approval Code HSR100364

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DOM & Batch No:  
REFER TO OUTSIDE OF  
THIS LABEL

EL849

