

READ DIRECTIONS FOR USE BEFORE USING THIS PRODUCT



ISOMATE[®]-C PLUS (Codling moth) Mating Disruption Dispensers

Active Ingredients:

182.3 mg *Cydia pomonella* pheromone;
a mixture of acetate esters

Net contents: 400 Ties

Manufactured by:

Shin-Etsu Chemical Co. Ltd,
Tokyo, Japan

Distributed by:

Etec Crop Solutions Ltd,
PO Box 51584, Pakuranga, Auckland

HSNO Class: 6.5B, 9.1D

KEEP OUT OF REACH OF CHILDREN

ENVIRONMENTAL WARNING: HARMFUL TO AQUATIC ORGANISMS. Avoid contamination of any water body with new or used ties.

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: When applying, wear gloves. Do not eat, drink or smoke while using. Wash hands and face before meals and after work. Wash protective gloves 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.

USER INFORMATION

ISOMATE[®] C PLUS dispensers are an aid in the suppression of codling moth (*Cydia pomonella*) activity within treated apple orchards.

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 codling moth (e.g. walnut trees and unmanaged apples) 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 apple trees within this distance with a codling moth active insecticide.

DIRECTIONS FOR USE – DO NOT OPEN PACK UNTIL READY TO USE

When: Dispensers should be applied as prescribed by a [fruit export protocol](#) if applicable, otherwise at the start of codling moth flight activity in your region: in early October in North Island regions, mid October in upper South Island and late October in lower South Island regions.

Rate: Use protective disposable gloves when applying dispensers. Dispensers should be applied at 1000 per hectare 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 1000 per ha. Use the following table to determine your correct dispenser rate per hectare.

Row spacing (m)	Tree spacing (m)	Trees per ha	To place approx 1000 per ha
5	3.5	571	2 per tree, 1 per tree every seventh row (or tree)
5	3	667	2 per tree, 1 per tree every second row (or tree)
5	2.5	800	1 per tree, 2 per tree every fourth row (or tree)
4.5	3	741	1 per tree, 2 per tree every third row (or tree)
4.5	2.5	889	1 per tree, 2 per tree every ninth row (or tree)
4.5	2	1111	1 per tree, miss every tenth tree

MONITORING

Pheromone traps These are the most cost-effective way of determining the effectiveness of mating disruption. High dose (10x concentrate) caps are required for effective population monitoring in the presence of pheromone dispensers. Traps should be placed high in the tree canopy (top 10-25%) using a rope and pulley system for trap service. Traps should be cleared weekly and the number of moths recorded.

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

Insecticide treatments Follow fruit export protocols and Integrated Fruit Production (IFP) guidelines for the application of insecticides. www.plantandfood.co.nz/traps

Exclusion of Liability: Please Read

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.

DOM & Batch No:
REFER TO OUTSIDE
OF THIS LABEL

**For information as to proper use, telephone (09)
925 7192 or go to www.plantandfood.co.nz**

HSNO Approval Code HSR100360

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