

For further information see attached pamphlet
Vir verdere inligting sien aangehegte pamflet

Isomate® F C M

Reg. No./Nr. L7692, Act No. / Wet Nr. 36 of / van1947

Namibia: Reg No./Nr. N-AR 1206

Malawi: Reg No./Nr. MW/PCB/2020/R/0566

A synthetic mating disruption pheromone for the disorientation of the male moths of the False codling moth (FCM), *Thaumatotibia leucotreta*, thereby preventing them from tracing female moths for mating; for use in avocados, citrus orchards, litchis, tree nuts (including almonds, cashews, chestnuts, hazelnuts, macadamias, pecans, pistachios, walnuts, coconuts, brazil nuts and pine nuts), pomegranates, stone fruit [including apricots, cherries (sweet and sour), nectarines, peaches, plums, prunes], table and wine grapes.

ACTIVE INGREDIENTS:

E-8 - dodecenyl acetate 166,8 mg/dispenser
Z-8 - dodecenyl acetate 70,8 mg/dispenser
E/Z-8 – dodecenol 2,4 mg/dispenser
Each dispenser contains a minimum of 240 mg active ingredients

'n Sintetiese paringsontwrigtings-feromoon om die manlike motte van die Valskodlingmot (VKM), *Thaumatotibia leucotreta*, te disoriënteer sodat vroulike motte nie opgespoor kan word vir paring nie; vir gebruik in avokado's, granate, lietsjies, boom neute (ingesluit amandels, kasjoeneute, hazelneute, kastanjeneute, makadamias, pekanneute, pistasieneute, okkerneute, kokosneute, brasilië neute en dennepitte), sitrusboorde, steenvrugte [ingesluit appelkose, kersies (soet en suur), nektariens, perskes, pruime, pruimedante], tafel- en wyndruiwe.

AKTIEWE BESTANDEDELE:

E-8 – dodekeniel asetaat 166,8 mg/vrysteller
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Elke vrysteller bevat 'n minimum van 240 mg aktiewe bestanddele.

NETT MASS

NETTO MASSA



REGISTRATION HOLDER / REGISTRASIEHOUER:

Nulandis® (A division of AECL Limited) / Nulandis® ('n Afdeling van AECL Beperk)

Reg. No. / Nr. 1924/002590/06

P.O. Box / Posbus 14418

Witfield, 1467

Tel : (011) 823 8000

www.nulandis.com

IN CASE OF POISONING PLEASE PHONE / IN GEVAL VAN VERGIFTIGING SKAKEL 0861 555777 / 0824468946

ISOMATE® is the registered trademark of BioControl Ltd./is die geregistreerde handelsmerk van BioControl Bpk.

Batch No:

Date of Manufacture:

UN Number: Not regulated / nie gereguleer nie

Lotnommer:

Vervaardigingsdatum:



**CAUTION
VERSIGTIG**



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WARNINGS:

Liquid in dispenser may cause eye irritation if it comes into contact with eyes.
Store **unopened** in original foil envelopes at temperatures below 20 °C in dry location.
If **ISOMATE FCM** is to be stored for more than one month, it should be held under refrigeration at or below 5 °C.
Keep out of reach of children, uninformed persons and animals.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be effective under all conditions because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment, or harm to man or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS:

Wash with soap and water after accidental skin contact with liquid.

Wear gloves when handling dispensers.

Avoid eye contact. In case of eye contact, flush eyes immediately with water. If irritation persists, consult a physician.

Destroy empty container and aluminum foil and never use for any other purpose again.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

General use restrictions:

Isomate FCM is recommended for susceptible avocados, citrus and pomegranate cultivars harvested before the end of May as well as stone fruit, table and wine grapes harvested before middle of April. Due to the nature of mating disruption, **Isomate FCM** should not be applied to orchard areas less than 6.25 hectares. For optimal efficacy, these areas should be more or less square. Avoid treatment of long and narrow areas where the length and width are less than 250 meters.

Untreated or conventionally sprayed orchards can serve as a source of mated FCM females resulting in fruit damage particularly along the borders of the treated orchard. The larger the area under mating disruption, the smaller the effect of mated immigrant females (See perimeter treatment).

Application : AVOCADOS, CITRUS, LITCHIS, TREE NUTS (including almonds, cashews, chestnuts, hazelnuts, macadamias, pecans, pistachios, walnuts, coconuts, brazil nuts and pine nuts), **AND POMEGRANATES ONLY**

Rate: Use 800 dispensers in total per ha per production season irrespective of tree density.

Timing: AVOCADOS, CITRUS, LITCHIS, TREE NUTS (including almonds, cashews, chestnuts, hazelnuts, macadamias, pecans, pistachios, walnuts, coconuts, brazil nuts and pine nuts), **AND POMEGRANATES ONLY**

End September to beginning of October (before first FCM emergence): Hang **500 ISOMATE FCM** dispensers in all relevant orchards followed by **300 Isomate FCM** dispensers at the beginning of January.

Application: STONE FRUIT, TABLE AND WINE GRAPES ONLY

Use 600 dispensers in total per hectare per production season irrespective of tree or vine density.

Timing: STONE FRUIT, TABLE AND WINE GRAPES ONLY

Beginning of November as a once off treatment for stone fruit and beginning of December as a once off treatment for table and wine grapes in all relevant orchards and vineyards.

Perimeter treatment: To compensate for the dilution effect along the edges, hang double the number of dispensers along the outer side of the perimeter of the treated area.

Application method:

Dispensers should be coiled (NOT twisted) once around a bread clip and applied to a lateral branch (finger size) or shoots or trellis wire (table and wine grapes) in such a way that it is not continuously exposed to direct sunlight. Do not place the dispenser too deep into the canopy as free airflow is required to distribute the pheromone.

Hang dispensers in the top 0.5 to 1 meter of a tree or 1.5 to 2.0 m above the orchard floor for table and wine grapes. Use any suitable applicator such as a wooden or plastic broomstick for bigger trees (consult your local Nulandis agent).

Space the dispensers uniformly throughout the orchard. If two dispensers have to be applied per tree, hang them on opposite sides.

Dispensers allocated to missing trees, should be applied to the previous or next tree.

Monitoring of Male Moths:

It is recommended that FCM pheromone monitoring systems be used in all mating disruption orchards to determine FCM emergence patterns. Install FCM monitoring traps by the beginning of October and inspect weekly until the end of harvest. Replace lures and traps as been recommended by the distinguish labels. After **Isomate FCM** is applied, very few moths, if any, should be caught. Should moths be caught in these orchards, consult your local Nulandis agent immediately.

Additional control methods

Mating disruption is most effective under conditions of low FCM infestations. If moderate to high moth populations are expected, spray an appropriate insecticide, according to the label recommendations, additional to the mating disruption program.

The period one month before harvest often coincides with increased moth activities and fruit damage. In such a case, apply an appropriate insecticide to reduce post harvest decay.

Start a weekly orchard sanitation program as soon as natural fruit drop commences. Maintain this program until the end of harvest. It is very important that all fruit or bunches still on trees or vines as well as those lying on the orchard floor are removed and destroyed after harvest.

Pamflet

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WAARSKUWINGS:

Die vloeistof in die vrystellers kan oogirritasie veroorsaak indien dit in kontak kom met oë.

Berg onoopgemaak in oorspronklike foelie-houers teen temperature onder 20 °C op 'n droë plek.

Indien **ISOMATE FCM** vir meer as 'n maand geberg gaan word, hou dit onder verkoelde toestande van 5 °C en laer.

Hou buite bereik van kinders, oningeligte persone en diere.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale klimaats- en bergingstoestande, sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing, of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.

VOORSORGMAATREËLS:

Was met seep en water indien die vloeistof toevallig met die vel in aanraking kom.

Dra handskoene wanneer vrystellers hanteer word.

Vermý kontak met die oë. In geval van oogkontak, spoel oë onmiddellik met water. Indien die irritasie voortduur, raadpleeg 'n geneesheer.

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI

Algemene Gebruiksbeperkings:

Isomate FCM word aanbeveel vir vatbare avokado's, sitrus en granaat kultivars wat vóór die einde van Mei klaar geoes is asook vatbare steenvrug, tafel- en wyndruif kultivars wat vóór middel April geoes word. Weens die aard van paringsontwrigting moet oppervlakte kleiner as 6.25 hektaar verkieslik nie met **Isomate FCM** behandel word nie. Vir optimale resultate moet hierdie oppervlakte verkieslik reghoekig wees. Vermý behandeling van lang, smal oppervlakte waar die wydte en lengte minder as 250 meter is.

Onbehandelde boorde óf waar konvensioneel gespuit word, kan dien as 'n besmettingsbron van bevrugte wyfies wat weer aanleiding kan gee tot vrugskade veral langs die buitenste grense van 'n paringsontwrigtingsboord. Hoe groter die oppervlakte onder paringsontwrigting hoe kleiner is die effek van bevrugte immigrerende wyfemotte (**Verwys na Behandeling van Boordgrense**).

TOEDIENING: SLEGS VIR AVOKADO'S, LIETSIJES, BOOM NEUTE (ingesluit amandels, kasjoeneute, hazelneute, kastanjeneute, makadamias, pekanneute, pistasieneute, okkerneute, kokosneute, brasilië neute en dennepitte), **SITRUS EN GRANATE:**

Gebruik in totaal 800 feromoongevulde vrystellers per ha per produksie-seisoen ongeag die boomdigtheid.

Tyd van Toediening: : SLEGS VIR AVOKADO'S, LIETSIJES, BOOM NEUTE (ingesluit amandels, kasjoeneute, hazelneute, kastanjeneute, makadamias, pekanneute, pistasieneute, okkerneute, kokosneute, brasilië neute en dennepitte), **SITRUS EN GRANATE:**

Einde September tot begin Oktober: (vóór die verskyning van die eerste generasie):

Hang **500 Isomate FCM** vrystellers voor die einde van September in relevante boorde en volg gedurende begin Januarie op met 'n verdere **300 Isomate FCM** vrystellers.

TOEDIENING: SLEGS VIR STEENVRUGTE, TAFEL- EN WYNDRUIWE:

Gebruik 'n totaal van 600 feromoongevulde vrystellers per hektaar per produksie seisoen ongeag boom- of wingerdstokdigtheid.

Tyd van Toediening: SLEGS VIR STEENVRUGTE, TAFEL- EN WYNDRUIWE:

Begin van November vir steenvrugte en begin van Desember vir tafel- en wyndruif as 'n eenmalige toediening.

Behandeling van Boordgrense:

Om te kompenseer vir die verdunningseffek langs die grense van die behandelde area, hang 'n ekstra **Isomate FCM** vrysteller aan elke boom langs die grens.

Toedieningsmetode:

Heg een vrysteller losserig aan 'n "broodklem" (Bread clip) deur dit in 'n spiraalvorm daarom te draai en hang dit aan 'n geskikte, vingerdikte, laterale sytak (bome) of loot óf opleidrade (tafel- en wyndruiwe) op so 'n manier dat dit nie deurlopend aan sonlig blootgestel word nie. Moenie die vrysteller te diep in die blaarkoepel hang nie aangesien daar vrye lugbeweging nodig is om die feromoon te versprei.

Hang vrystellers in die boonste 0.5 tot 1.0 m van die boom of 1,5 tot 2.0 m bokant grondvlak vir tafel- en wyndruiwe. Vir groter bome gebruik 'n geskikte toediener soos 'n hout- of plastiek besemstok om die broodklem bo in die boom te plaas (Raadpleeg u plaaslike Nulandis agent).

Spasieër die vrystellers eweredig deur die boord. Indien twee vrystellers per boom gehang moet word, hang dit aan teenoorgestelde kante.

Vrystellers geoormerk vir afwesige of klein inboetbome, moet verkieslik aan die vorige óf die volgende boom gehang word.

Monitering van Mannetjie Motte:

Daar word aanbeveel dat FCM feromoon-moniteringstelsels aangebring word in alle boorde wat behandel word met paringsontwrigtingsferomoon om FCM verskyningspatrone vas te stel.

Installeer Valskodlingmot lokvalle aan die begin van Oktober en inspekteer weekliks tot aan die einde van die oesperiode. Vervang lokvalle en vrystellers soos deur die onderskeie etikette voorgestel. Na uithang van **Isomate FCM** vrystellers behoort baie min, indien enige, mannetjie motte gevang te word. Indien motte gevang word moet u plaaslike Nulandis agent onmiddellik gekontak word.

Aanvullende beheermaatreëls:

Paringsontwrigting is baie meer suksesvol onder lae valskodlingmot infestasies. Indien gematige tot hoë infestasielakke verwag word, moet 'n geskikte insekdoder volgens etiketaanbevelings aanvullend tot die paringsontwrigtings program toegedien word. Die periode een maand vóór oes word dikwels gekenmerk deur hoë infestasielakke en gepaardgaande skade. In só 'n geval moet 'n geskikte insekdoder toegedien word om na-oesverrotting indirek teen te werk.

Weeklikse boordsanitasie moet 'n aanvang neem sodra natuurlike vrugval begin.

Hou hiermee vol tot aan die einde van die oesperiode. Dit is baie belangrik dat alle vrugte of trosse nog aan bome of wingerdstokke óf die wat op die grond lê, direk na oes verwyder en vernietig moet word.