ProFarm

GRANDEVO®

Registration No. / Registrasie nr. L 11319 Act / Wet 36 of/van 1947

READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS

GROUP	UNB	INSECTICIDE

A water dispersible granule biological insecticide for the suppression and control of False Codling Moth *(Thaumatotibia leucotreta)*, Rust mite *(Phyllocoptruta oleivora)*, thrips *(Scirtothrips aurantii)* and Psylla *(Trioza erytreae)* on citrus.	'n Waterdispergeerbare korrel biologiese insekdoder vir die onderdrukking en beheer van Valskodlingmot *(Thaumatotibia leucotreta)*, roesmyt *(Phyllocoptruta oleivora)*, blaaspootjie *(Scirtothrips aurantii)* en Silla *(Trioza erytreae)* op sitrus.

WARNING

Hazard statements	Precautionary statements
Causes eye irritation Harmful to aquatic life Harmful to aquatic life with long lasting effects	Wash exposed areas thoroughly after handling Avoid release to the environment. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical attention Dispose of contents/ container to an approved waste disposal plant

Active ingredient / Aktiewe Bestanddeel

Chromobacterium subtsugae strain PRAA4-1ᵀ .... 30% w/w
(contains no less than / bevat nie minder as 1000 cabbage looper killing units CLKU/mg)
(microbial/mikrobiese)

Net volume... 2 kg ...Netto volume

Registered by / Geregistreer deur:
Pro Farm Group, Inc.
Represented by / Verteenwoordig deur: Disa Bio-Technologies cc (Reg. No. 1999/47619/23)
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Manufactured by / Vervaardig deur:
Pro Farm Group Inc.
www.marronebio.com

Imported & Distributed by/ Ingevoer en Versprei deur:
anasac
Anasac South Africa (Pty) Ltd.
P.O.Box 2859 - Parklands, 2121
Reg. No. 2009/0009/07

Batch No.: *See on packaging*
Date of manufacture: *See on packaging*
Lot Nr: *Sien op die verpakking*
Datum van vervaardig: *Sien op die verpakking*

UN No/VN Nr: UNB
Emergency Number: 0861-555-777

GRANDEVO is a registered trademark of / is 'n geregistreerde handelsmerk van Pro Farm Group, Inc.

WARNINGS:

CAUSES EYE IRRITATION
HARMFUL TO AQUATIC LIFE
HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS

- Handle with care.
- Store in a cool place, away from food and feedstuffs.
- **Re-entry:** Do not enter treated area until spray deposit has dried unless wearing suitable protective clothing.

Although this remedy has been extensively tested under a large variety of conditions the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions; quality of dilution water; compatibility with other substances not indicated on the label and the occurrence of resistance of the pest against the remedy concerned 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 exposed areas thoroughly after handling
Avoid release to the environment.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical attention
Dispose of contents / container to an approved waste disposal plant

- Avoid inhalation of spray mist.
- Avoid contact with skin and eyes. The product may cause irritation to eyes and skin.
- Wear suitable protective clothing, rubber gloves and face protection when preparing and applying the spray.
- Do not eat, drink or smoke during the spraying operation or before washing hands and face and changing clothing.
- Avoid drift onto adjacent fields where spray may land on unprotected personnel, livestock, edible crops which are soon to be harvested, grazing, rivers or dams.
- Clean applicator before using for other remedies and dispose of wash water where it will not contaminate crops, rivers, dams and grazing.
- Clean up any spillage of concentrate with inert absorbent material and wash area thoroughly with plenty of water.
- Keep away from and prevent contamination of food, feedstuffs, drinking water and eating utensils.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to 10% of that of the container. Add the rinsings to the contents of the spray tank.
- Destroy the empty container by perforation and do not use for any other purpose.

FIRST AID MEASURES

INHALATION: Remove person to fresh air. If the person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for treatment.

EYES: Hold eye open and rinse slowly and gently with water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Do not use an eye ointment. Call poison control center or doctor for treatment advice.

SKIN: Remove contaminated clothing. Rinse skin immediately with plenty of water for at least 15–20 minutes. Call a poison control center or doctor for treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or physician. Do not give anything by mouth to an unconscious person.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED.

This product is suitable for use in organic production.

GRANDEVO WDG is a biological insecticide containing cells of *Chromobacterium subtsugae* strain PRAA4-1ᵀ and spent fermentation media that functions primarily as a stomach poison for the control or suppression of many foliar feeding pests including caterpillars and certain sucking insects and mites. It has multiple effects including reducing fecundity and oviposition, deterring feeding and acting as a stomach poison on Homoptera and Hemiptera. GRANDEVO WDG should be mixed with water and applied as a foliar spray with conventional pesticide ground spray equipment.
Apply in sufficient quantity of water, depending on crop size, to ensure thorough coverage of infested plant parts.

MIXING INSTRUCTIONS:

Fill the spray tank to 75% capacity with clean water and start agitation. Add the required volume of GRANDEVO® then continue to fill the spray tank. Maintain agitation during spraying and use the spray mixture without delay. Do not allow the mixture to stand overnight. Use a strainer with no finer than 50 mesh. Apply with medium or coarse spray nozzles. In conditions of low humidity and high temperatures use a coarser droplet size in order to reduce drift and ensure good coverage.
Do not apply during a temperature inversion when drift potential is high.

Do not combine in the spray tank with other pesticides, surfactants, adjuvants or fertilizers unless a prior test for physical compatibility, effectiveness and non-injury to the crop has been performed and no problems have been experienced.

CROP / PEST	DOSAGE	REMARKS
CITRUS **False Codling Moth** *(Thaumatotibia (Cryptophlebia) leucotreta)* **Rust Mite** *(Phyllocoptruta oleivora)*	200 g / 100 ℓ spray mixture Add a suitable adjuvant	Apply as a full cover preventive spray in 500–3000 ℓ spray mix per hectare. Ensure complete coverage of the foliage and developing fruit. Avoid carrier volumes and/or adjuvant combinations that result in spray runoff or drip accumulation on fruit bottoms. Make the first application when larvae first appear and/or not later than 28 days before expected harvest. Follow up with further applications (up to 3) at 7-day intervals.
Thrips *(Scirtothrips aurantii / Scirtothrips citri)*	2 kg/ha Add a suitable adjuvant	Apply as a full cover spray to new growth flushes when first signs of thrip infestation are noticed on leaves or during blossoming and just prior to petal fall when thrip larvae attack the developing fruit. Follow up with up to 2 further applications at 7-day intervals.
Psylla *(Trioza erytreae)*	3 kg/ha Add a suitable adjuvant	Apply as a full cover spray to new growth flushes or when eggs hatch (predicted or observed) and symptoms of damage are first noticed, and repeat after 7 days.

Notes:
- Proper timing of application, targeting new populations or recently hatched larvae and nymphs is important for optimal results. Apply when pest populations are low.
- Add a suitable adjuvant (wetter, spreader, penetrant eg. Villa 51, Break-Thru, Wetcit) to improve coverage on leaves and on newly developing fruit.

VILLA 51 (L8050) is a product of Villa Crop Protection.
BREAK-THRU (L6764) is a registered trademark of Goldschmidt Chemical Corporation.
WETCIT® (L7474) is a registered trademarnk of ORO AGRI (SA) (Pty) Ltd.

WAARSKUWING:

VEROORSAAK OOGIRRITASIE
SKADELIK VIR WATERORGANISMES
SKADELIK VIR WATERORGANISMES MET LANGDURIGE EFFEKTE

- Hanteer versigtig.
- Berg in 'n koel plek weg van voedsel en voer.
- **Herbetreding:** Moet nie behandelde gebiede betree alvorens die spuitneerslag droog is nie tensy beskermende oorklere gedra word.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle omstandighede doeltreffend sal wees nie, aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond- klimaats- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie, sowel as die metode, tyd en akkuraatheid van die toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade van enige aard, aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom of 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 blootgestelde areas deeglik na hantering.
Vermy besoedeling van omgewing.
In geval van aanraking met oë, spoel oë met skoon water uit vir 'n paar minute. Verwyder kontaklense indien teenwoordig en moontlik. Hou aan met uitspoel.
Indien oogirritasie voortduur: Kry mediese hulp.
Verwyder inhoud/houer weg na 'n goedgekeurde afvalverwyderingsaanleg.

- Moet nie die spuitmis inasem nie.
- Vermy kontak met die vel en oë. Die produk mag irritasie aan oë veroorsaak.
- Dra beskermende klere, gesigskerm en rubber handskoene tydens voorbereiding en toediening.
- Moet nie eet, drink of rook terwyl bespuiting en voordat hande en gesig gewas is en ander klere aangetrek is nie.
- Vermy die oorwaai na aangrensende gebiede waar die spuitmengsel op onbeskermde mense, diere of eetbare gewasse wat binnekort geoes gaan word, of op weiding, riviere of damme kan land.
- Maak toerusting deeglik skoon na gebruik en gooi waswater weg waar dit nie gewasse, weiding, riviere of damme sal besoedel nie.
- Klam enige verspilde konsentraat aan met inert absorbeerende materiaal en spoel die plek met baie water af.
- Hou weg van en voorkom besoedeling van voedsel voer, drinkwater en eetgerei.
- Keer die leë houer uit oor die spuittenk of mengbak en dreineer vir ten minste 30 sekondes nadat die vloeistof tot slegs 'n drup verminder het. Spoel die houer daarna drie maal uit met 'n volume water van ten minste 10% van die houer. Gooi die spoelwater by die inhoud van die spuittenk.
- Vernietig leë houer deur gate daarin te maak en plat te druk. Moet nie vir enige ander doel gebruik nie.

NOODHULPBEHANDELING:

INASEMING: Verwyder persoon na vars lug. As die persoon nie asemhaal nie, ontbied 'n ambulans, gee dan kunsmatige asemhaling, verkieslik mond-tot-mond indien moontlik. Bel gifbeheersentrum of dokter vir behandelingsadvies.

Oë: Hou oog oop en spoel stadig en saggies uit met water vir ten minste 15 minute. Verwyder kontaklense indien teenwoordig, na die eerste 5 minute gaan dan voort om oog uit te spoel. Moenie 'n oogsal gebruik nie. Bel gifbeheersentrum of dokter vir behandelingsadvies

VEL: Verwyder besoedelde klere. Spoel dadelik die geaffekteerde area met baie water vir ten minste 15–20 minute. Bel gifbeheersentrum of dokter vir behandelingsadvies.

INNAME: Bel gifbeheersentrum of dokter onmiddellik vir behandelingsadvies. Laat persoon 'n glas water drink as hy kan sluk. Moenie braking veroorsaak nie tensy dit deur 'n gifbeheersentrum of geneesheer aangese word. Moet nooit iets per mond aan 'n bewusselose persoon toedien nie.

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI.

Geskik vir gebruik in organiese produksie.

GRANDEVO WDG is 'n biologiese insekdoder wat selle van *Chromobacterium subtsugae* ras PRAA4-1ᵀ en besteede fermentasie media behels bevat, wat hoofsaaklik funksioneer as 'n maaggif vir die beheer of onderdrukking van talle blaarvreter plae insluitend ruspers en sekere suigende insekte en myte. Dit het veelvoudige effekte insluitend die vermindering van fertiliteit en oviposisie, wat voeding afskrik beperk en as 'n maaggif teen Homoptera en Hemiptera beskou. GRANDEVO WDG moet met water gemeng en as 'n blaarbespuiting met konvensionele grond spuittoerusting toegedien. Dien toe in voldoende hoeveelheid water, afhangende van gewas grootte, om behoorlike bedekking van plant oppervlakke te verseker.

MENGINSTRUKSIES:

Maak die spuittenk driekwart vol met skoon water en begin roering. Voeg die benodigde volume GRANDEVO® by en maak die tenk daarna vol. Handhaaf roering gedurende bespuiting en gebruik die spuittenk mengsel onmiddellik. Moet nie toelaat dat die mengsel oornag staan nie. Maak gebruik van 'n sif van minstens 50 mesh. Dien toe met medium of growwe spuitkoppe. Onder toestande van lae humiditeit en hoe temperature maak gebruik van 'n growwe druppelgrootte om wegdrywing te verminder en goeie bedekking verseker.
Moenie toedien gedurende 'n temperatuurinversie wanneer wegdrywing potensieel hoog is.

Moenie met ander plaagdoders, benatters, byvoegmiddels of misstowwe in die spuittenk meng alvorens 'n toets vir fisiese mengbaarheid, effektiwiteit en gewasveiligheid, gedoen is nie.

CROP / PEST	DOSAGE	REMARKS
SITRUS **Valskodlingmot** *(Thaumatotibia (Cryptophlebia) leucotreta)* **Roesmyt** *(Phyllocoptruta oleivora)*	200 g / 100 ℓ spuitmengsel Voeg 'n geskikte byvoegmiddel by	Dien toe as 'n voldek voorkomende bespuiting tot die punt van afloop in 500–3000 ℓ spuitmengsel per hektaar. Verseker volledige bedekking van die blare en ontwikkelende vrugte. Vermy spuitvolumes en/of byvoegmiddel kombinasies wat afloop en drup versameling op vrugte tot gevolg kan hê. Dien die eerste behandeling toe wanneer eerste larwes voorkom en/of nie later as 28 dae voor verwagte oes nie. Volg op elke 7 dae met tot 3 bespuitings.
Blaaspootjie *(Scirtothrips aurantii / Scirtothrips citri)*	2 kg/ha Voeg 'n geskikte byvoegmiddel by	Dien toe as 'n voldek bespuiting op nuwe blaargroei wanneer die eerste tekens van blaaspootjie beskadiging op blare waargeneem word, of gedurende blom en net voor blomblaarval wanneer blaaspootjies die ontwikkelende vrugte aanval. Volg op met tot 2 verdere bespuitings elke 7 dae.
Silla Lemoenbladvlooi *(Trioza erytreae)*	3 kg/ha Voeg 'n geskikte byvoegmiddel by	Dien toe as 'n voldek bespuiting op nuwe blaargroei of wanneer eiers uitbroei (verwag of waargeneem) en eerste simptome waargeneem word. Herhaal na 7 dae.

Notas:
- Behoorlike tydsberekening van toediening, gemik op nuwe populasies of onlangs uitgebroeide larwes en nimfe is belangrik vir optimale resultate. Dien toe wanneer plaag populasies laag is.
- Voeg 'n geskikte byvoegmiddel by (benatter, verspreider, penetreerder (bv. Villa 51, Break-Thru, Wetcit) om bedekking op blare en nuwe ontwikkelende vrugte te verbeter.

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