

# HARVEST CURAFLY FRUIT FLY BAIT

Reg. No : L 10873 , Act No 36 of 1947



**HARVEST**  
CHEMICALS

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**INSECTICIDE**

# HARVEST CURAFLY FRUIT FLY BAIT

Reg. No : L 10873 , Act No 36 of 1947

IMPORTANT: Read the label before use / BELANGRIK: Lees die etiket voor gebruik.  
KEEP OUT OF REACH OF CHILDREN / HOU BUITE BEREIK VAN KINDERS

INSECTICIDE GROUP CODE	5	INSEKMIDDEL GROEP KODE
Product Info - English		Product Info - Afrikaans

A selective bait concentrate for the control of fruit fly infestations in the production of various fruit, berry and vegetable crops. suitable for use in organic farming practices.

'n Selektiewe lokaas konsentraat vir die beheer van vrugtevlieginfestasies in die produksie van 'n verskeidenheid vrugte -bessie en groente gewasse. Geskik vir aanwending in organiese boerdery praktyke



Warning

**Hazard Statements:**  
Very toxic to aquatic life with long lasting effects.  
**Precautionary Statements:**  
Keep out of reach of children.  
Read carefully and follow all instructions.  
Collect spillage.

Active ingredient(s) / Aktiewe bestanddeel(e)s  
Spinosad (Spinosyns) 0.24 g/l ..... Spinosad (Spinosiene) 0.24 g/l

Net Volume

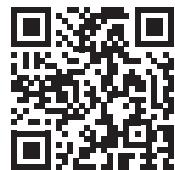
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Inhoud

UN No. /Nr.

**HARVEST**  
CHEMICALS

Distributed by: Harvest Chemicals  
Registered by CURA CHEM CC.  
Company Reg. No. 2000/037398/23  
19, Britnay Place, Moreleta Park, 0181.  
Tel: 072-658-0700  
Poison Helpline: 086-155-5777



INSECTICIDE

## WARNINGS

**Withholding period** – the minimum time between the last application and harvest:

Grapes, Tomatoes and Peppers - 0 days.

Avocados, Citrus, Mangoes, Berry crops, Pome fruit, Stone fruit, Vegetables and other crops - 1 day.

- Handle with care.
- Slight eye irritation may be caused.
- Moderately toxic to fish and toxic to aquatic invertebrates. **Do NOT** apply directly on to open water areas.
- Keep away from food and animal feeds.
- Keep out of reach of children and uninformed persons.
- Avoid contact with animal and avian species.
- Store under roof under cool and dry conditions.
- Re-entry period** - Do not enter the treated field until the spray deposit has dried unless wearing protective clothing.
- Aerial Application:** Notify all inhabitants of the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

## Beneficial Insects

- "CURA FLY" is relatively safe to bees.
- "CURA FLY" contains an ammoniac related compound as an attractant to fruit flies which repels bees.
- Caution - do not apply directly onto foraging bees or swarms of bees.
- "CURA FLY" will not harm beneficial insects such as Coccinellidae, Neuroptera, predatory mites and insect parasites.

## Integrated Pest Management (IPM) Programme

- “CURA FLY” can be recommended for use in IPM programmes as it has no significant harmful effect on parasitic or predatory insects and mites such as ladybirds, lacewings, killer bugs and predatory mites.

## PRECAUTIONS

- Do not allow this product to freeze.
- Rain within 3 hours of application can reduce the efficacy of this product.
- Store in the original labelled container and do not decant for storage.
- After skin contact, thoroughly wash the affected parts with soap and water.
- Safety clothing such as overall, shoes, gloves and face shield must be worn when handling the product in concentrated form.
- In case of accidental eye contact, rinse eyes with clean water for at least 15 minutes. Consult a medical practitioner if eye irritation persists.
- Do not eat, drink or smoke whilst mixing the product or during application.
- After contact with the product, change clothing and wash hands and face before eating, drinking, smoking or using toilet.
- Avoid spray drift onto adjacent crops, grazing, and open natural water sources.
- Wash and rinse application equipment after use and before using for other remedies. Dispose of wash and rinsing water where it will not contaminate crops, grazing, rivers, dams and water sources.
- After emptying the container into spray tank, triple rinse the container, adding the rinsings to the spray tank. Do not use the empty container for any other purpose. Destroy the empty container by perforation and flattening. Dispose of in a manner where no contamination of food, animals or water resources can take place.
- Avoid spray drift onto adjacent crops, grazing, and open natural water sources.
- Wash and rinse application equipment after use and before using for other remedies. Dispose of wash and rinsing water where it will not contaminate crops, grazing, rivers, dams and water sources.
- After emptying the container into spray tank, triple rinse the container, adding the rinsings to the spray tank. Do not use the empty container for any other purpose. Destroy the empty container by perforation and flattening. Dispose of in a manner where no contamination of food, animals or water resources can take place.

**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 actions and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions; quality of dilution water; compatibility with other substance not indicated on the label and occurrence of resistance against the remedy concerned as well 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 event of any uncertainty.**

## Relevant substance

Component	%
Spinosad	>90

## FIRST AID

### Inhalation

Move person to fresh air. If person is not breathing, call an emergency responder or an ambulance, then give artificial respiration; if by mouth-to-mouth use rescuer protection (pocket mask, etc). Call a poison control centre or doctor for further treatment advice.

### Skin contact

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice. Suitable emergency safety shower facility should be available in work area.

### Eye contact

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

### Ingestion

No emergency medical treatment necessary.

### Symptoms of human poisoning

None known.

### Note to physician.

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet and if available, the product container or label with you when calling a poison control centre or doctor or going for treatment.

## **RESISTANCE WARNING**

For resistance management "**CURA FLY**" fruit fly bait is a group code 5 insecticide. Any insect population may contain individuals naturally resistant to "**CURA FLY**" fruit fly bait and other group code 5 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. "**CURA FLY**" fruit fly bait or any other group code 5 insecticide may not control these resistant insects.

To delay insecticide resistance: Avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with products from different insecticide group codes. Integrate other control methods (chemical, cultural, biological) into insect control programmes. For specific information on resistance management contact the registration holder of this product.

## **DIRECTIONS FOR USE - USE ONLY AS INDICATED ON LABEL**

**"CURA FLY"** is a bait concentrate, which should be properly diluted with water before application according to standard ground and aerial application practices.

**"CURA FLY"** may also be applied by aircraft, undiluted in concentrated form, on the principles of a ready-to-use product (RTU) with the use of the Aerosplat® intermittent dispensing system.

## **GENERAL INSTRUCTIONS**

**Dilution Water Quality:** Avoid the use of alkaline water and/or water with a high conductivity and/or high dissolved salt content.

### **Mixing Instructions for "CURA FLY" Fruit Fly Bait"**

**"CURA FLY" Fruit Fly Bait** is a product with high viscosity and high density compared to water. It is of primary importance that particular care be taken when mixing with water. The product is water soluble but vigorous agitation is required to ensure that it is completely dissolved and the concentrate does not sink to the bottom of the spray tank. Pre-mixing the bait concentrate with an equivalent volume of water before adding to the spray tank is recommended. Half fill the spray tank with clean water and commence agitation while slowly adding the required volume of "**CURA FLY**" while filling the spray tank to the required volume. Maintain vigorous agitation for a further 10 minutes to ensure that a homogeneous mixture is obtained before commencing application.

Continue agitation throughout the application process to ensure uniformity of the bait mixture.

## **CAUTION**

- The bait mixture must be applied within 12 hours after dilution.
- Do not add wetting agents, water buffers or any other chemical compound to the bait mixture.
- Rate of application, droplet sizes exceeding 4mm in diameter or application techniques resulting in fusion of droplets and accumulation in the same area may be conducive to the development of sooty mould on the accumulated bait.

**Citrus Rind Stippling:** Certain citrus cultivars such as Nodorcott mandarins are susceptible to rind stippling under climatic conditions when delayed drying of droplets occurs and / or when the incorrect droplet size is applied.

Copper sprays preceding the "**CURA FLY**" bait application may result in blemishes occurring under the bait droplets.

**Berry and Grape Crops:** Avoid droplets of "**CURA FLY**" on berries and, where berries are produced in bunches, the spray must be directed between the bunches.

**Rain:** Heavy persistent rain will wash bait off and a repeat application will be required.

## **GROUND APPLICATION(General)**

Use suitable, properly calibrated equipment fitted with the prescribed nozzle sizes without whirl plates to provide solid thin streams, targeting the inside of fruit tree canopies. The thin stream will break up into coarse droplets upon striking branches and leaves, scattering in the inside of the tree canopy and/or over the target area.

## **Recommended application techniques**

Nozzle sizes and pump pressures may be varied to achieve the desired application rate per ha. Use the guidelines provided by different equipment and spray nozzle manufacturers to deliver a thin solid stream, directing the stream upwards into the tree canopies. This will result in the solid stream breaking up into coarse droplets when making contact with any obstruction such as branches, leaves or fruit. Focus on droplet sizes of 1 to 4 mm in diameter.

## **Application to fruit trees (Ground Application) - Bearing Trees.**

**"CURA FLY"** must be applied at the recommended dosage rate as specified for each crop in the table below.

- The bait concentrate must not be diluted to exceed a ratio of 1.0l to 1.2 l bait concentration on 29.0 or 28.8 litres water to make a 30 litre bait mixture.
- Bait droplets must not exceed 4mm in diameter unless specified differently for a specific crop.
- Medium or full cover spray techniques are not recommended.
- An ideal application would be to obtain 1 to 4 mm droplets on the inside of the tree canopy at heights of 1.0-2.5 m above ground level, depending on tree size.

- Bait must be applied to the one side of each row, alternating consecutive applications to alternative sides of the row.
- Alternatively, entry may be gained between two rows directing the application to either side, applying the bait to one side of each row. In such instance the following interrow can be skipped. Enter alternative rows for follow up applications.

## AERIAL APPLICATION

Aerial application of "**CURA FLY**" may only be conducted by a registered aerial application operator using a registered and correctly calibrated aircraft according to the instructions of SANS Code 10118 (Aerial application of Agricultural Remedies). Ensure that fields are accurately marked and that the aerial spray operator knows exactly which fields to spray. Obtain an assurance from the aerial spray operator that the following requirements will be met.

### Aerial Spray Equipment

Use suitable atomising equipment that will produce the desired droplet size to cover the target area minimising product loss through spray drift.

Guidelines for nozzles to meet the criteria for aerial application of "**CURA FLY**" **fruit fly bait**: Solid stream spray nozzles orientated to spray in the direction of airflow (180 ° to the rear) are the most appropriate nozzle types to achieve larger droplets for bait application.

#### Nozzles with flat fan or cone spray patterns should not be used.

Nozzles equipped with "Spraying Systems" D- type hollow cone tips without the whirlplate and orifice diameter of 3-6 mm are suitable. The number of spray nozzles may differ from 2-6 per wing, depending on the required application volume, type and size of aircraft and application speed. All nozzles should be placed within less than 75 % of wingspan for fixed wing aircraft and 90 % of rotor span for helicopters.

### Application by Gyrocopter

Nozzles to be positioned within 90 % of rotor diameter pointing 90° downwards   Nozzles must be a maximum 0.5 m from the rotor tip. Number of nozzles - 2 non-drip nozzles (1 per side).

### Application Parameters

- Use a low volume of 2.0 to 4.0 l spray mixture per ha.
- A droplet coverage of 3 – 6 droplets per cm<sup>2</sup> must be recovered at the target area.
- A droplet spectrum with a VMD of 500 – 1000 micron is recommended and fine droplets, with a VMD less than 300 micron to be minimised.
- Do not spray when the aircraft is in a climb, at the top of a turn or during a dive or when banking.
- Effective swath width for "**CURA FLY**" bait application must be determined for each aircraft taking cognisance of the atomizing equipment and nozzles in use.
- Recommended Flying Height: Rotary atomisers – 8 to 12m; Hydraulic nozzles – 15 to 20m; Helicopter – 25 to 30m.

### Application by Gyrocopter equipped with Aerosplat® intermittent dispensing system.

#### Application Parameters

Two (2) Aerosplat® dispensing systems to be mounted on a boom to facilitate a distance of 4 meters between the nozzles on the dispensers on either side of the cabin of the Gyrocopter. Aerosplat® dispensing system to be calibrated with the prescribed nozzles and pressure to deliver the required rate of "**CURA-FLY**" per ha at a speed of 120 km/ hr from a flying height of 8 to 12 meters, targeting a ground recovery swath width of 10 meters and a droplet coverage of 1 to 3 droplets per 20 cm<sup>2</sup> with a droplet recovery size of 4-10 mm. Re-enter the area of application at 30 meter flight path spacings.

Application by drone equipped with Aerosplat® intermittent dispensing systems.

#### Application Parameters

Drone equipped with a single Aerosplat ®dispensing system.

Aerosplat® dispensing system to be calibrated with the prescribed nozzles and pressure to deliver the required rate per ha at a speed of 30 km/hr from a flying height of 15-20 meters, targeting a ground recovery swath width of 5 meters and a droplet coverage of 1 -3 droplets per 20 cm<sup>2</sup> with a droplet recovery size of 4-10 mm. Re-enter the area of application at 20 meter flight path spacings.

**NOTE:** The most effective flight path spacing to achieve an acceptable ground recovery swath width for the application of "**CURA- FLY**" bait must be established for each specific aircraft taking cognisance of the spray nozzles, atomisers and dispensing systems. Consult with the distributor or registration holder.

### Meteorological Conditions

- The difference between the wet and dry bulb readings as determined by a whirling hygrometer must not exceed 8°C.
- Do not spray under turbulent, unstable conditions or during the heat of the day when rising thermals and down draughts occur.  
Do not spray under temperature inversion conditions (spraying in or above the inversion layer).
- Do not spray when the wind speed exceeds 15 km per hour.

## **GENERAL**

For maintenance of phytosanitary conditions non-bearing trees can be treated by scattering larger droplets of up to 6 mm at the same bait mixture rate applicable to bearing trees.

A longer life span and greater fruit fly attraction can be expected from the larger droplets.

Fruit fly should be monitored throughout the year by using suitable fruit fly traps and orchards should be treated when threshold levels are exceeded.

## **IMPORTANT**

- Since fruit fly have phytosanitary restrictions for export crops it is important that all areas surrounding the crop be monitored and treated to prevent fruit fly build up on the outskirts from where orchards can be infested.
- Orchard sanitation is equally important by removing all fallen and unharvested over-ripe fruit from the orchards.

## **Cleaning of equipment**

Thorough cleaning of spraying and other equipment is essential as remaining bait residues will provide favourable conditions for microbial and fungal growth.

Chlorine at a 0.1 % solution will assist to remove undesirable contamination of equipment.

## APPLICATION

AERIAL APPLICATION ALL CROPS LISTED	DOSAGE /HA	APPLICATION DIRECTIONS
1. Fixed wing aircraft helicopter and gyrocopter equipped with standard non-drip nozzles.	1.0 ℥ "CURA- FLY" in 1.0-3.0 ℥ water per ha.  (2.0-4.0 ℥ bait mixture per ha)	"CURA FLY" bait has a high viscosity and high density compared to water. Vigorous agitation is required to ensure thorough mixing before adding it to the aircraft hopper. The spray mixture must be evenly distributed over the target area and spray drift must be minimised. Repeat the bait application at 7 to 14 day intervals depending on insect pressure or in accordance with the prescribed protocol of the relevant crop research controlling authorities.
2. Gyrocopters and drones equipped with Aerosplat ® intermittent dispensing system.	1000ml (1.0 litre) "CURA- FLY" undiluted as a ready to use (RTU) application.	Apply "CURA- FLY" at a droplet recovery size of 4-10 mm. The larger droplets have a longer life span providing mini bait stations with improved fruit fly attracting abilities and prolonged fruit fly feeding. Target a droplet coverage of 1-3 droplets per 20cm <sup>2</sup> . Repeat the "CURA- FLY" application at 7-14 day intervals depending on insect population pressure or in accordance with the prescribed protocol of the relevant crop research controlling authorities.

CROP / PEST	DOSAGE /HA	APPLICATION DIRECTIONS
ALL FRUIT AND CITRUS AND BERRY CROPS.  Mediterranean Fruit Fly ( <i>Ceratitis capitata</i> ) Natal Fruit Fly ( <i>Ceratitis rosa</i> ) Marula Fruit Fly ( <i>Ceratitis cosyra</i> ) Olive Fly ( <i>Batrocera oleae</i> ) Oriental Fruit Fly ( <i>Batrocera orientalis</i> )	<b>GROUND APPLICATION</b> 1.0 – 1.2ℓ "CURA FLY" in 9.0 – 29 ℥ water (10 – 30 ℥ bait mixture per ha)	Apply "CURA FLY" bait as coarse droplets (approx. 1-4 mm on bearing fruit trees and 4 -6 mm on non-bearing fruit trees. Apply a total of 10 to 30 litres bait mixture per planted ha. Use only calibrated equipment adapted to meet the application criteria. Scatter droplets approximately 1 - 2.5 m above ground level to one side of each row of trees. Alternate sides with each consecutive application.  The solid thin stream method of application as prescribed under 'Ground Application (General)' is recommended to achieve coarse droplets.  Repeat bait applications at least every 7 -14 days depending on insect pressure or in accordance with the prescribed protocol of the relevant crop research controlling authorities.  Treat all susceptible and surrounding orchards.  Alternatively apply to one side of two adjacent rows at the same time. Enter alternate inter-rows on consecutive applications to facilitate both sides of trees being treated.
	<b>AERIAL APPLICATION</b> 1.0 ℥ "CURA FLY" in 1.0-3.0 ℥ water per ha.  (2.0-4.0 ℥ mix per ha)	"CURA FLY" has a high viscosity and high density compared to water. Vigorous agitation is required to ensure thorough mixing before adding it to the aircraft hopper.  The spray mixture must be evenly distributed over the target area and spray drift must be minimised.  Repeat the bait application at 7 to 14-day intervals depending on insect pressure.

CROP / PEST	DOSAGE /HA	APPLICATION DIRECTIONS
<b>TABLE GRAPES, WINE GRAPES AND OTHER TRELLISED FRUIT CROPS</b>  Mediterranean Fruit Fly ( <i>Ceratitis capitata</i> ) Natal Fruit Fly ( <i>Ceratitis rosa</i> ) Marula Fruit Fly ( <i>Ceratitis cosyra</i> ) Oriental Fruit Fly ( <i>Batrocera orientalis</i> )	<b>GROUND APPLICATION</b> 1.0-1.2 ℥ "CURA FLY" in 9.0 – 28.8 ℥ water (10 -30ℓ bait mix per ha)  <b>AERIAL APPLICATION</b> 1.0 ℥ "CURA FLY" in 1.0-3.0 ℥ water per ha. (2.0-4.0 ℥ mix per ha)	<p>Apply "CURA FLY" as coarse droplets of 2-6 mm using calibrated equipment to achieve an application rate of 10-30 litres spray mixture per planted ha. The solid thin stream method of application as prescribed for 'Ground Application (General)' is recommended to achieve course droplets.</p> <p>Repeat applications of "CURA FLY" at 7 to 14-day intervals on table grapes, wine grapes and trellised fruit using the shorter interval on ripening fruit and grapes.</p> <p>Treat all surrounding orchards and vineyards at 7 to 14-day intervals to prevent fruit fly infestations from untreated areas.</p> <p><b>Table Grapes and trellised fruit:</b>            Do not apply "CURA FLY" directly onto the grape bunches or fruit. Treat every second or third row directing the spray to the leaf canopy above the fruit/bunch line in slanting trellises and between fruit/bunch line in overhead trellises.</p> <p><b>Wine Grapes:</b>            Treat every second or third row using the solid stream method of application as prescribed for 'Ground Application (General)' to achieve course droplets of 2-6 mm.</p>
<b>ALL CUCURBIT CROPS</b>  Pumpkin flies ( <i>Dacus species</i> ) Oriental Fruit Fly ( <i>Batrocera orientalis</i> )	<b>GROUND APPLICATION</b> 1.0– 1.2 ℥ "CURA FLY" in 9.0 – 28.8 litre water (10 - 30 ℥ bait mix per ha)  <b>AERIAL APPLICATION</b> 1.0 ℥ "CURA FLY" in 1.0-3.0 ℥ water per ha. (2.0-4.0 ℥ mix per ha)	<p>Apply "CURA- FLY" in course droplets of 2-6 mm on flowering and fruiting plants. Row planting at 10m, row spacing – do spot treatments at 4 m in-line spacings.</p> <p>Apply at 7 to 14-day intervals depending on fruit fly population pressure.</p> <p>Treat all surrounding susceptible fields.</p>
<b>ALL VEGETABLE CROPS INCLUDING TOMATOES</b>  Mediterranean Fruit Fly ( <i>Ceratitis capitata</i> ) Natal Fruit Fly ( <i>Ceratitis rosa</i> ) Marula Fruit Fly ( <i>Ceratitis cosyra</i> ) Oriental Fruit Fly ( <i>Batrocera orientalis</i> )	<b>GROUND APPLICATION</b> 1.0-1.2 ℥ "CURA FLY" in 9.0 – 28.8 ℥ water (10 -30ℓ bait mix per ha)  <b>AERIAL APPLICATION</b> 1.0 ℥ "CURA FLY" in 1.0-3.0 ℥ water per ha. (2.0-4.0 ℥ mix per ha)	<p>Apply "CURA- FLY" as course droplets of 2 to 6 mm on bearing vegetables. The solid thin stream method of application prescribed for 'Ground Application (General)' is recommended to achieve course droplets.</p> <p>Repeat application at 7-14 day intervals depending on fruit fly population pressure.</p> <p>Apply at shorter intervals when vegetables start ripening.</p> <p>Trellised tomatoes and vegetables – Treat one side of each row applying a thin band.</p> <p>All row vegetables and un-trellised tomatoes planted at 10 m row spacing - Do spot treatments at 4 m in-line spacings.</p> <p>Treat all susceptible fields.</p>

## WAARSKUWINGS:

**Onthoudingsperiode** – Die minimum aantal dae tussen die laaste toediening en oes:

Druwe, Tamaties en Soetrissies – 0 dae

Avocados, Bessiegewasse, Mangoes, Sagtevrugte, Steenvrugte, Sitrus, Groente en Ander gewasse - 1 dag.

- Die produk moet versigtig hanteer word.
- Ligte oogirritasie mag met oogkontak veroorsaak word.
- Matig giftig vir vis en giftig vir ander water organismes. Moet nie oor oop waterbronne toegedien word nie.
- Berg onder dak onder koel droë toestande.
- Moet nie nabij voedsel of diere voedingsprodukte geberg word nie.
- Hou buite bereik van kinders, oningesigte persone en diere.
- Voorkom kontak met diere en voëls.
- Herbetreding: Moet nie die behandelde area betree alvorens die sputneerslag nie droog is nie, tensy beskermende klerasie gedra word.
- Lugtoediening: Stel alle inwoners in die nabije omgewing van die lugbespuitingsarea in kennis en reik die nodige waar skuwing uit. Voorkom besoedeling en wegdrywe van sputnewel na water of aangrensende gewasse en gebiede.

## Voordelige Insekte

- “CURA FLY” is relatief veilig vir bye.
- “CURA FLY” bevat ‘n ammoniak- agtige verbinding wat vrugtevlieë aanlok maar bye afweer.
- Versigtig - Voorkom direkte toediening op voedende of swerms bye.
- “CURA FLY” sal nie voordelige insekte wat parasities van aard of predatoriese insekte en myte, Coccinellidae en Neuroptera skaad nie.

## Geintegreerde Plaagbestuursprogram (GPB)

- “CURA FLY” is gesik vir aanwending in (GPB) programme aangesien dit geen beduidende nadelige impak op parasietiese of predatoriese insekte en myte soos skilpad kewers, goudogies, roofinsektes en predatoriese myte het nie.

## PRECAUTIONS

- Moet nie die produk laat vries nie.
- Reën binne 3 uur na toediening kan na verswakte resultate lei.
- Berg altyd in die oorspronklike ge-etiketeerdehouer en moet nie in ander houers oorgooi vir berging nie.
- Moet nie die sputnewel inasem nie.
- Ingeval van vel kontak was die geaffekteerde dele deeglik met seep en water.
- Veiligheidsklerasie soos oorpak, skoene, handskoene en gesigskerm moet gedra word wanneer die produk in gekon sentreede vorm hanteer word.
- In geval van oogkontak moet oë met skoon water vir tenminste 15-minute uitgespoel word. Raadpleeg ‘n Mediese Praktisyn indien oogirritasie voortduur.
- Moet nie eet, drink of rook terwyl die produk vermeng of aangewend word nie.
- Verwyder besoedelde klerasie en was hande, gesig en enige ligaamsdelle wat in kontak met die produk was deeglik voordat daar geeet, gedrink of toilet besoek word.
- Voorkom dat sputnewel na aangrensende gewasse, weidings, riviere of oop waterbronne weggedryf word.
- Was en spoel toedieningstoerusting deeglik na gebruik en voordat dit vir die toediening van ander middels aange wend word. Gooi die was en spoel water uit op ‘n veilige plek weg waar dit nie gewasse, weidings, riviere, damme of oop waterbronne sal besoedel nie.
- Nadat die houers behoorlik in spuittenk geledig is moet dit drie maal met skoon water uitgespoel word en die spoelwater in die spuittenk geledig word voordat dit plat geslaan word, gate daarin gemaak word. Raak ontslae van die houer waar geen besoedeling van voedsels, diere voeding of water bronne kan plaasvind nie. Onder geen omstandighede moet leë houers vir enige ander doel aangewend word nie.
- Gebruik slegs soos op die etiket aangedui.

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 daar van beïnvloed kan word deur faktore soos abnormale grond-, klimaat-, en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe 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 effekte op mens of dier, of vir ‘n gebrek aan prestasie as gevolg van die versuum 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 geval van enige onsekerheid.

**Relevante stowwe:**

Komponent	%
Spinosad	>90

**EERSTEHELP****Inaseming**

Verskuif persoon na vars lug. Indien die persoon nie asemhaal nie, ontbied 'n nooddien of 'n ambulans, pas kunsmatige asemhaling toe; indien mond-tot-mond, gebruik redderbeskerming (sakmasker, ens.). Bel 'n gifbeheersentrum of dokter vir verdere behandelingsadvies.

**Velkontak**

Verwyder besmette klere.

Bel 'n gifbeheersentrum of dokter vir verdere behandelingsadvies. Behoorlike nood stort geriewe behoort by werksplek beskikbaar te wees.

**Oogkontak**

Hou oog oop en spoel stadig en sagkens met water vir 15 – 20 minute. Verwyder kontaklense, indien gedra word, na die eerste 5 minute. Hou aan om die oog te spoel. Ontbied 'n gifbeheersentrum of geneesheer vir behandelingsadvies.

Behoorlike nood-oogwasfasiliteit behoort by die werksarea beskikbaar te wees.

**Inname**

Geen mediese behandeling is nodig.

**Simpotome van menslike vergiftiging**

Nie bekend nie.

**Nota aan geneesheer**

Geen spesifieke teenmiddel. Behandeling van blootstelling moet gerig wees op die beheer van simptome en die kliniese toestand van die pasiënt. Hou die Veiligheidsdatablad en indien beskikbaar, die produkhouer of etiket by jou wanneer jy 'n gifbeheersentrum of dokter ontbied of vir behandeling gaan.

**WEERSTANDSWAARSKUWING**

"CURA FLY" vrugtevlieg lokaas is 'n groepkode 5 insekdoder. Enige populasie van 'n spesifieke insek spesie mag individue insluit wat 'n natuurlike weerstand teen "CURA FLY" vrugtevlieg lokaas, of enige ander groepkode 5 insekdoder het. Indien hierdie insekdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die insek populasie oorheers. Hierdie weerstandbiedende insekte sal waarskynlik nie deur "CURA FLY" vrugtevlieg lokaas of enige ander groepkode 5 insekdoder beheer word nie.

Om weerstand teen insekdoders te vertraag: Vermy die eksklusieve herhaalde gebruik van insekdoders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van produkte in verskillende insekdoder-groepkodes. Integreer ander beheermaatreels (chemies, verbouing, biologies) in die insekdoder programme. Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

**GEBRUIKSAANWYSINGS****Gebruik slegs soos aangedui.**

- "CURA FLY" is 'n lokaas konsentraat wat deeglik met water verdun moet word voor toediening waar standaard grond en lug toedieningspraktyke van toepassing is.
- "CURA FLY" mag egter onopgelos in gekonsentreerde formaat op die konsep van "Ready-to-use" (RTU) met 'n vliegtuig aangewend word waar daar gebruikgemaak word van die Aerosplat® sporadiese pulsering toedieningstelsel.

**ALGEMENE INSTRUKSIES**

Verdunningswater Kwaliteit: Vermy die gebruik van alkaliese water en/of water met 'n hoë geleidingsvermoë en/of water met 'n hoë opgelosde soute inhoud.

**Vermengingsinstruksies**

"CURA FLY" vrugtevlieg lokaas is 'n produk met hoë viskositeit en hoë digtheid in vergelyking met water. Dit is van primêre belang dat besonderse sorg aan die dag gelê word wanneer die produk met water vermeng word. Alhoewel die produk water oplosbaar is, vereis dit aggressiewe roering om te verseker dat die konsentraat behoorlik oplos en nie na die bodem van die tenk uitsak nie. Vooraf vermenging van die lokaas konsentraat met 'n ekwiwalente volume water voor toeoeging tot die spuitten word aanbeveel.

Maak die sputtenk met skoon water halfvol en begin om die water te roer. Voeg die verlangde hoeveelheid "CURA FLY" stadig by en sorg dat die sputtenk tot die verlangde volume gevul word. Die roeringsproses moet vir 'n verdere 10 minute voortgesit word teneinde te verseker dat 'n homogene mengsel bewerkstellig word voordat daar met toediening in aanvang geneem word.

Die roeringsproses moet deurgaans tydens toediening voortgeset word teneinde eenvormigheid van die lokaas mengsel te bewerkstellig.

## GROND TOEDIENING (Algemeen)

Gebruik gesikte, behoorlike gekalibreerde sputmasjiene wat met die voorgeskrewe sputkoppe sonder waaierplaatjies toegerus is teneinde 'n dun soliede sputstraal te verkry waarmee die binneraamwerk onder die blaargewelf van vrugtebome geteiken word. Die dun straal sal in growwe druppels opbreek sodra dit takkies en blare tref en na die binnekant van die boom en/of teiken area versprei.

### Aanbevele Toedieningstegnieke

Sputkopgroottes en pompdruk mag afgewissel word teneinde die gewenste toedienings volumes per hektaar te verkry. Maak gebruik van die riglyne wat deur die verskillende sputtoerustings en sputkopvervaardigers voorgeskryf word teneinde 'n dun soliede sputstraal te bewerkstellig wat in 'n opwaarse rigting onder die boom se blaargewelf ingespuit word. Hierdie straaljie sal tydens kontak met takke, blare en vrugte opbreek in growwe druppels. Fokus op druppelgroottes van 1 tot 4 mm in deursnit.

### Toediening op Vrugtebome (Grondtoediening) - Draende Bome

"CURA FLY" moet teen die aanbevole dosis op onderskeie gewasse, soos gespesifieer in die toedieningstabellie, aangewend word.

- Die lokaas konsentraat moet nie die verdunningsverhouding van 1.0 liter tot 1.2 liter lokaaskonsentraat op 29 of 28.8 liter water om 'n 30 liter lokaas mengsel aan te maak, oorskry nie.
- Lokaas druppels, moet nie 4 mm in deursnee oorskry nie tensy anders gespesifieer vir 'n spesifieke gewas.
- Voldekbespuitings word nie aanbeveel nie.
- Die gewenste toediening kan bewerkstellig word met druppelgroottes van 1 tot 4 mm toegedien aan die binnekant van die blaargewelf van vrugtebome teen 'n hoogte van 1 tot 2.5 m bo grondvlak afhangend van boomgrootte.
- Lokaas moet slegs aan die eenkant van elke ry toegedien word en afgewissel word met alternatiewe ry toediening tydens opvolg bespuitings.
- As alternatiewe toedieningsmetode, kan daar tussen twee rye toegetree word en bespuiting na weerskante gerig word om sodoende die lokaas aan slegs een kant van elk van die twee rye toe te dien. In sodanige geval kan die daaropvolgende tussenry oorgeslaan word. Alternatiewe tussenry moet tydens opvolgtoedienings betree word.

## LUGTOEDIENING

Lugtoediening van "CURA FLY" mag slegs deur 'n geregistreerde lugbespuitingsoperator met 'n geregistreerde en korrek gekalibreerde vliegtuig volgens instruksies van SANS kode 10118 ("Aerial Application of Agricultural Remedies") gedoen word. Verseker dat die lande akkuraat gemerk is en dat die sputoperator presies weet watter lande gespuit moet word. Verkry versekering van die sputoperator dat aan die volgende vereistes voldoen sal word.

### Lugtoediening Toerusting

Gebruik gesikte atomiseringsapparaat wat die vereiste druppelgrootte sal produseer om bedekking van die teiken area te verseker en die wegdrywing van sputnewel te voorkom.

Riglyne vir sputkopkeuses om aan die vereistes vir lugtoeding van "CURA FLY" vrugtevlieglokaas te voldoen:  
Sputkoppe met soliede straal wat in die rigting van die lugvloei ( $180^{\circ}$  na agter) gemonteer is lewer die beste resultate vir lokaastoedienings.

Sputkoppe met plat waaier- of kegel sputpatrone moet nie gebruik word nie.

Sputpunte toegerus met "Spraying Systems" D- type holkegel sputpunte sonder warrelplaatjies met 'n deursnit van 3 -6 mm sal gesik wees.

Die aantal sputkoppe wat per vlerk benodig word sal wissel van 2-6 per vlerk afhangend van die toedieningsvolume, tipe en grootte vliegtuig en toedieningslugspoed. Die sputkoppe moet eweredig in die binneste 75 % van die vlerkspan van vastevlerk vliegtuie en 90 % van die span van rotorlemme vir helicopters, gemonteer word.

**Todiening met Gyrocopter:** Sputkoppe met binne 90 % van die span van die rotorlemme en met 'n  $90^{\circ}$  afwaartse hoek gepositioneer wees. Sputkoppe moet nie meer as 0.5 m vanaf die rotor punt gepositioneer wees nie. Twee (2) non-drip sputkoppe (een aan elke kant) is voldoende.

Die mees doeltreffende sputwydte vir "CURA FLY" lokaastoediening moet vir elke spesifieke vliegtuig bepaal word met in agneming van die sputkop en atomiserings apparaat in gebruik .

### Toedieningsvereistes – Standaard Lugbesuitingstoerusting.

- Gebruik 'n lae volume van 2.0 tot 4.0 ℓ sputmengsel per ha.
- 'n Druppelbedekking van 3- 6 druppels per cm<sup>2</sup> moet op die teikenarea herwin word.
- 'n Druppelspektrum met 'n VMD van 500 – 1000 mikron word aanbeveel en fyn druppels met 'n VMD kleiner as 300 mikron, moet vermy word.
- Moet nie sput wanneer die vliegtuig aan die bopunt van 'n omkeer is of tydens 'n duik of terwyl dit draai of uitstyg nie.
- Aanbevole Vlieg Hoogte: Roterende sputkoppe – 8 tot 12 m; Hidroliese sputkoppe – 15 tot 20 m; Helikopter – 25 tot 30 m.

### Toediening met Gyrocopter toegerus met Aerosplat®sporadiese pulsering toedieningstelsel.

#### Toedieningsriglyne

- Twee (2) Aerosplat® toedieningstelsels moet op 'n sputbalk gemonteer word teneinde 'n afstand van 4 meter tussen die sputkoppe op die toedieners weerskante van die kajuit van die Gyrocopter te fasiliteer.
- Aerosplat® toedieningstelsel moet met die voorgeskrewe sputkoppe en sputdruk gekalibreer word om die aanbevole dosis "CURA FLY" per ha toe te dien teen 'n spoed van 120 kilometer per uur vanuit 'n vlieghoogte van 8 tot 12 meter.
- Teiken 'n sputbaanwydte van 10 meter op grondvlak met 'n druppelgrootte van 4 – 10 mm teneinde 1-3 druppels per 20 cm<sup>2</sup> te herwin.
- Herbetree die toedieningsarea met vlugbaan spasieerings van 30 meter.

### Toediening met hommeltuig toegerus met Aerosplat®sporadiese pulsering toedieningstelsel.

- Aerosplat® toedieningstelsel moet met die voorgeskrewe sputkoppe en sputdruk gekalibreer word om die aanbevole dosis "CURA FLY" per ha toe te dien teen 'n spoed van 30 km / uur vanuit 'n vlieghoogte van 15 tot 20 meter.
- Teiken 'n sputbaanwydte van 5 meter op grondvlak met 'n druppelgrootte van 4 – 10 mm teneinde 1-3 druppels per 20 cm<sup>2</sup> te herwin.
- Herbetree die toedieningsarea met vlugbaan spasieerings van 20 meter.

**LET WEL:** Die mees doeltreffende vlugbaan spasieering om 'n aanvaarbare sputbaan wydte op grondvlak te verseker vir die toediening van "CURA FLY" lokaas moet vir elke spesifieke vliegtuig bepaal word met inagneming van die sputkoppe, atomatiseringsapparaat en pulserings toediening stelsel in gebruik.

#### Meteorologiese Toestande:

- Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihigrometer bepaal, moet nie 8 °C oorskry nie.
- Moenie toedien tydens turbulente en onstabiele weerstoestande of gedurende die hitte van die dag wanneer stygde en dalende konveksie windbeweging plaasvind nie.
- Moenie toedien onder temperatuur inversie toestande (deur bo of binne die inversielae te sput) nie.
- Moenie sput indien die windsspoed 15 km per uur oorskry nie.

#### Algemeen

Vir die volhoubaarheid van fitosanitäre toestande kan nie-draende vrugtebome behandel word met groter druppels van tot 6 mm in deursnit, teen dieselfde lokaas mengsel soos wat op draende bome van toepassing is. Die groter druppel het 'n langer leeftyd en beter lokvermoë. Vrugtevlieg monitering behoort dwarsdeur die jaar plaas te vind, met die aanwending van gesikte vrugtevliegvalletjies en boorde moet behandel word sodra drempelwaardes oorskry word.

#### Belangrik

Aangesien vrugtevlieg fitosanitäre inperkinge op uitvoervrugte het is dit belangrik dat alle areas in die onmiddelike omgewing van die oes gemoniteer word en indien nodig behandel word teneinde die opbou van vrugtevlieë te voorkom wat andersins die oesgebied sal infesteer. Boord sanitasie is ewe belangrik en alle boorde moet na die oes skoon gepluk word en vrugte op die grond verwyder word.

#### Skoonmaak van toerusting

Behoorlike skoonmaak van toerusting is noodsaakklik aangesien lokaas residuie mikrobiiese en swamgroei kan bevorder. Chloor teen 0.1 % oplossing sal bakteriese groei verwyder.

## TOEDIENING

LUGTOEDIENING ALLE GENOEMDE GEWASSE	DOSIS /HA	TOEDIENINGSGEBRUIKSAANWYSINGS
1. Vastevlervliegtuie Helikopters en Gyrocopters toegerus met standaard non-drup sputkoppe.	1.0 ℥ "CURA- FLY" in 1.0-3.0 ℥ water per ha.  (2.0-4.0 ℥ lokaas per ha)	"CURA FLY" is 'n produk met hoë viskositeit en hoë digtheid in vergelyking met water. Deeglike vermenging word vereis alvorens die sputmengsel in die vliegtuig se tenk gegooi word. Die sputmengsel moet eweredig oor die teiken area versprei word en sputnewel moet geminimi- seer word. Herhaal lokaastoedienings met 7 tot 14 dag intervalle afhangend van insekdruk of volgens die voorskriftelike protocol van die betrokke gewasnavorsingsbeheerliggame.
2. Gyrocopters en hommetjie toegerus met Aerospat ® sporadiese pulsering toediening-stelsel	1000 mL (1.0 liter) "CURA- FLY" onverdund as 'n 'gereed om te gebruik' aan- wending.	Dien "CURA FLY" toe teen druppelgroottes van 4 tot 10 mm verhaling op die teikenarea. Teiken 'n druppel bedekking van 1- 3 druppels per 20 cm <sup>2</sup>  Die groter druppels het 'n langer leeftyd en beter lok vermoe met verlengde vrugtevlieg voedings eienskappe. Herhaal toediening met 7 tot 14 dag intervalle afhangend van insekdruk of volgens die voorskriftelike protokol van die betrokke gewasnavorsingsbeheerliggame.

GEWAS / PLAAG	DOSIS /HA	TOEDIENINGSGEBRUIKSAANWYSINGS
ALLE VRUGTE EN SITRUS EN BESSIE GE- WASSE	<b>GRONDBESPUITING</b> 1.0 – 1.2 ℥ "CURA FLY" in 9.0 – 28.8 ℥ water  (10 – 30ℓ lokaas-mengsel per ha)	Dien "CURA FLY" lokaas as 'n growwe druppel toe (± 1 – 4 mm op draende vrugte bome en 4 -6 mm op nie-draende bome). Dien 'n totale volume van 10 to 30 liter aangemaakte lokaas per geplante ha toe. Gebruik slegs gekalibreerde toerusting, wat aangepas is om aan toedieningsvereistes te voldoen.  Versprei druppels ongeveer 1 - 2.5 m bo die grondvlak aan een kant van elke ry bome. Dien daaropvolgende toedieings op alternatiewe kante van rye toe.  Die soliede dun sputstraal metode van toediening soos voorgeskryf in die paragraaf Grondtoediening (Algemeen) word aanbeveel teneinde growwe druppels te verkry.  Herhaal lokaastoedieings minstens 7 -14 dae af- hangend van insekdruk of volgens die voorskriftelike protokol van die betrokke gewas navorsingsbeheerliggame.  Behandel alle vatbare en omliggende boorde.  Alternatiewelik kan die lokaas gelykydig aan eenkant van twee rye toegedien word. In sodanige geval kan die daaropvolgende ry oorgestaan word. Vir opvolgbespuitings moet hertoetrede in alternatiewe rye plaasvind.
	<b>LUBESPUITING</b> 1.0ℓ "CURA FLY" in 1.0-3.0ℓ water per ha. (2.0-4.0ℓ mengsel per ha)	"CURA FLY" is 'n produk met hoë viskositeit en hoë digtheid in vergelyking met water. Deeglike vermenging word vereis alvorens die sputmengsel in die vliegtuig se tenk gegooi word. Die sputmengsel moet eweredig oor die teiken area versprei word en sputnewel moet geminimiseer word. Herhaal lokaastoedienings met 7 tot 14-dag intervalle afhangend van insekdruk.

GEWAS / PLAAG	DOSIS / HA	TOEDIENINGSGEBRUIKSAANWYSINGS
TAFELDRUIWE, WYNDRUIWE EN ANDER OPGELEIDE GEWASSE	<b>GRONDBESPUITING</b> 1.0 – 1.2 ℥ "CURA FLY" in 9.0 – 28.8 ℥ water (10 – 30 ℥ lokaas-mengsel per ha)  <b>LUBESPUITING</b> 1.0ℓ "CURA FLY" in 1.0-3.0 ℥ water per ha. (2.0-4.0 ℥ lokaas-mengsel per ha)	Dien "CURA FLY" toe met gekalibreerde toerusting as 'n growwe druppelaanwending (druppelgrootte 2-6 mm). Dien 'n totale volume van 10-30 liter lokaas- mengsel per aangeplante ha toe. Die soliede dun sputstraal metode van toediening soos voorgeskryf in die paragraaf 'Grondtoediening (Algemeen)' word aanbeveel teneinde growwe drup- pels te verkry. Herhaal toediening van "CURA FLY" elke 7 tot 14 dae. 7 dag toedienings intervalle word aanbeveel op vrugte en druive in die rypwordstadium. Behandel omliggende boorde, wingerde en ander vatbare gewasse met 7-14 dag intervalle om infestasie van onbehandelde areas te voorkom.
Meditereense Vrugtevlieg ( <i>Ceratitis capitata</i> ) Natalse Vrugtevlieg ( <i>Ceratitis rosa</i> ) Maroela Vrugtevlieg ( <i>Ceratitis cosyra</i> ) Oriентale Vrugtevlieg ( <i>Bactrocera orientalis</i> )		<b>Tafeldruwe en opgeleide gewasse:</b> Voorkom toediening van "CURA FLY" direk op die vrugte of vrugtrosse. Behandel elke tweede of derde ry met gerigte bespuiting – teiken die blaar gewelf bokant die vrugte/vrugtrosse in skuinskappe en tussen die vrugte /vrugtrosse by dakpriële  <b>Wyndruiwe:</b> Behandel elke tweede of derde ry. Gebruik die soliede dun sputstraal metode van toediening soos voorgeskryf in die paragraaf Grondtoediening (alge- meen) teneinde growwe druppelgroottes van 2-6 mm te verkry.
PAMPOEN GEWASSE	<b>GRONDBESPUITING</b> 1.0 – 1.2 ℥ "CURA FLY" in 9.0 – 28.8 ℥ water (10 – 30 ℥ lokaas-mengsel per ha)  <b>LUBESPUITING</b> 1.0ℓ "CURA FLY" in 1.0-3.0 ℥ water per ha. (2.0-4.0 ℥ lo- kaas-mengsel per ha)	Dien "CURA FLY" toe as 'n growwe druppel aanwending met druppelgroottes van 2-6 mm tydens blom en vrugret.  In plantrye met 10m spasieering – wend kolbehandeling aan met 4 m in-lyn spasiering.  Herhaal toediening met 7 tot 14 dag intervalle afhangend van insekdruk. Behandel alle vatbare omliggende lande.
ALLE GROENTEGE- WASSE, INSLUITEND SOETRISSIES EN TAMA- TIES	<b>GRONDBESPUITING</b> 1.0 – 1.2 ℥ "CURA FLY" in 9.0 – 28.8 ℥ water (10 – 30 ℥ lokaas-mengsel per ha)  <b>LUBESPUITING</b> 1.0ℓ "CURA FLY" in 1.0-3.0 ℥ water per ha. (2.0-4.0 ℓ lokaas-mengsel per ha)	Dien "CURA FLY" toe as 'n growwe druppel-aan- wending met druppelgroottes van 2-6 mm by wyse van die soliede dun sputstraal metode soos voorgeskryf in die paragraaf 'Grondtoediening (Algemeen)'. Herhaal toediening met 7 tot 14 dag intervalle afhangend van die insekdruk. Toediening met korter intervalle wanneer groente ryp word.  Behandel een kant van elke ry in opgeleide tamaties en groente. Kolbehandeling word aanbeveel waar tamaties en groente met 10 m ry spasieering aangeplant is. Doen kolbehandeling op 4 m tussen spasies in die rye.  Behandel alle omliggende vatbare lande.