ICHIBAN 100 EW

WARNINGS

Withholding period:
Allow the following minimum number of days between last APPLICATION and harvest or grazing of the following crops:

Macadamias……30 days
Maize……14days
Tomatoes and Cruciferae……4 days
Potatoes……21 days

IMPORTANT: The recommended withholding period between last application and harvest meets local residue requirements, but may not meet export requirements.

- Handle with care.
- Harmful when swallowed and if absorbed through the skin.
- Irritating to eyes, skin and the mucous membrane.
- Toxic to fish and wildlife.
- Only use the product as prescribed in order to minimise the risk towards bees, beneficial parasites, beneficial predators and fish.
- **DO NOT** apply during peak bee activity and **DO NOT** direct the spray or allow the spray to drift towards beehives.
- Do not spray over or allow spray to drift to water bodies such as ponds, rivers, dams, fish hatcheries or streams.
- Store in the original container in a cool, dry, well-ventilated place.
- Store away from food, feed, seed, fertilizer and other agricultural products.
- Keep out of reach of children, uninformed persons and animals.
- Do not use this product in any way contrary to the directions on this label.
- **ICHIBAN 100 EW** has been tested on the most important commercial cultivars without any phyto toxic effects. More susceptible cultivars may be released in future will which need to be tested; for this apply **ICHIBAN 100 EW** to a limited test area before commercial applications are made.
- **Re-entry:** Do not enter treated area until spray deposit has dried unless wearing 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 effective under all conditions. The activity and effect thereof may be affected by factors such as abnormal soil, 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, 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 by 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

- Wear a face shield and rubber gloves whilst handling, preparing and applying the spray mixture.
- Do not inhale fumes or spray mist.
- Avoid skin and eye contact.
- Wash with soap and water immediately after use and accidental skin contact.
- Wash contaminated clothing following use.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face and changing clothing.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Triple rinse empty containers as follows: Invert the container over the spray tank or mixing tank and allow to drain for at least 30 seconds after flow has slowed down to a drip. Thereafter, rinse the empty container three times with a volume of water equal to a minimum 10% of that of the container. Add the rinsate to the contents of the spray tank before destroying the container as prescribed.
- Destroy the empty container by perforation and flattening and dispose of it in a safe manner.
- **Never** re-use the empty container for any other purpose.

SYMPTOMS OF HUMAN POISONING

Numbness and tingling of the hands and feet. Lung oedema and convulsions.

FIRST AID TREATMENT

ALWAYS SEEK TREATMENT BY A DOCTOR IMMEDIATELY.

Remove the patient from the source of poisoning to fresh air and keep him quiet and reassured.
Skin contact: Carefully remove contaminated clothing as well as shoes. Wash contaminated body area with a non-abrasive soap and lots of water. Persons providing first aid must wear gloves to avoid self-contamination. If irritation develops, seek medical attention.
Eye contact: Flush eyes immediately with large amounts of clean water for at least 15 minutes. Occasionally lift the upper and lower lids. **Consult an eye specialist**
Ingestion: If swallowed, wash the mouth out with water, give the patient plenty of water to drink (if conscious) and **DO NOT** induce vomiting. **Seek medical attention and show this label to the doctor.**

NOTE TO PHYSICIAN

Treat symptomatically (decontamination, vital functions). There is no known antidote.

MODE OF ACTION

ICHIBAN 100 EW acts by preventing the transmission of impulses along nerves, by blocking the passage of sodium ions through sodium channels in nerve membranes, thus preventing action potentials passing down axons. This intoxication typically results in a rapid knockdown and resultant mortality. **ICHIBAN 100 EW** is a non-systemic insecticide with contact and stomach action. It acts on the central and peripheral nervous system in very low doses.

RESISTANCE WARNING

For resistance management, **ICHIBAN 100 EW** is a group code 3 insecticide. Any insect population may contain individuals naturally resistant to **ICHIBAN 100 EW** and other group code 3 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **ICHIBAN 100 EW** or any other group code 3 insecticide.

To delay insecticide resistance:

- Avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with registered products from different insecticide group codes.
- Integrate other control methods (chemical, cultural, biological) into insect control programmes.

Since the occurrence of resistance cannot be forecast, users are advised to keep treated crops under close observation. If treatment is not effective following the use of **ICHIBAN 100 EW** as recommended, a resistant population may be present. If a resistant population is positively identified, consideration should be given to prompt use of an insecticide with a different mode of action for which there is no record of resistance to the relevant pest. For specific information on resistance management, contact the registration holder of this product.

RESISTANCE MANAGEMENT

- The resistance of African Bollworm (*Helicoverpa armigera*) to synthetic pyrethroids has been confirmed. As part of a strategy designed to prevent the development of widespread resistance, the following guidelines must be adhered to for the control of *Helicoverpa armigera:*
  Do not apply more than 2 applications per growing season.
- **For the optimal control of susceptible Bollworm populations, the larvae should not exceed 10 mm in length at the time of application.**
- If a pyrethroid application resulted in ineffective control, do not re-spray with any synthetic pyrethroid (even at a corrective dosage rate). Make use of a product from a different chemical group.

DIRECTIONS FOR USE
Use only as directed.

MIXING INSTRUCTIONS

Half-fill the spray tank with suitable water. Shake the container thoroughly prior to use. The efficacy of **ICHIBAN 100 EW** can be affected by very hard water (> 1000 ppm. solutes) and/or water with a high pH value. Use a suitable buffer at the registered rate to adjust the pH of the water. This buffer must be mixed with water prior to the addition of **ICHIBAN 100 EW.**
Take approximately 10 L of this pH corrected water out of the mixing tank and thoroughly mix the required volume of **ICHIBAN 100 EW** therewith.
If any other product is to be mixed with **ICHIBAN 100 EW**, the required volume of this product must be pre-mixed in a similar way.
The addition of molasses reduces the pH as well as the evaporation of the spray mist. For ground application, add 10% molasses per volume. For aerial application, add 20% molasses per volume.
Agitate the water in the spray tank and add the product/s to the tank in the following sequence as relevant: Suitable buffer, suspension concentrate, water-soluble concentrate, emulsifiable concentrate.
Fill the spray tank to the desired volume with water while maintaining agitation. Maintain agitation during application. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight**. Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

COMPATIBILITY

The compatibility of **ICHIBAN 100 EW** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made. Do not make tank mixtures with other agricultural remedies or foliar feed products without first ensuring that no reduction in efficacy or crop damage will result. When mixing **ICHIBAN 100 EW** with other products, all **WARNINGS, PRECAUTIONS** and **DIRECTIONS OF USE** appearing on that particular label must be adhered to.

Do not mix **ICHIBAN 100 EW** with seaweed extracts, amitraz, chinomethionat, Dodine, prothiophos and vamidothion.

APPLICATION METHODS
Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application. **Constant agitation throughout the spray operation is essential**. Only clean water should be used.

INSTRUCTIONS FOR APPLICATION
- When **ICHIBAN 100 EW** is applied to dense growing crops, the efficacy may be negatively affected.
- Thus, ensure that thorough penetration and wetting is obtained.
- Monitor the efficacy within 3 days following application. A follow up application may be needed if unacceptable levels of control have been achieved.
- To a certain degree, Bollworm moths are repelled by **ICHIBAN 100 EW**, therefore it can be expected that fewer eggs may be laid on treated plants.
- **ICHIBAN 100 EW** resists wash-off by rain if the spray mixture is allowed to dry completely on the plants.
- All application equipment must be suitable, in good working order and correctly calibrated in order to give the desired coverage for that particular application method.

AERIAL APPLICATION
Aerial application may only be done 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). It is important to ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria are met:

Equipment
- Use suitable atomising equipment that will produce the desired droplet size and coverage of the target area and will ensure minimum loss of product through drift.
- The operator must use a nozzle set-up that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles and atomisers should be positioned within the inner 75% of the wingspan to prevent droplets from entering the wingtip vortices.

Application Parameters

- A minimum volume of 30ℓ spray mixture per ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy nor be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended.
- A droplet coverage of 30 – 40 droplets per sq cm must be recovered at the target.
- A droplet spectrum with a VMD of 250 – 280 microns is recommended. Ensure that the production of fine droplets, with a VMD of less than 150 microns, is restricted to a minimum.
- The height of the spray boom should be maintained at between 3 and 4m above the target.
- Do not spray when the aircraft is in a climb, at the top of a turn or during a dive or when banking.

Meteorological Conditions

- The difference between the wet and dry bulb readings as determined by a whirling hygrometer must not exceed 8 ºC.
- Do not spray under turbulent, unstable conditions or during the heat of the day when rising thermals and downdraughts occur.
- Do not spray under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80% and above). As this may lead to:
    a) Reduced efficacy due to inadequate coverage due to suspension and evaporation of small droplets in the air.
    b) Damage to sensitive crops and non-target areas due to drifting of the suspended spray cloud away from the area under treatment.
- Do not spray when the wind speed exceeds 15 km per hour.

General

- 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 above requirements will be met and that the relevant data will be kept for future reference.**

USE RESTRICTIONS

- **Warning against resistance:** Refer to the "**RESISTANCE WARNING**" and "**RESISTANCE MANAGEMENT**" described above.
- Cutworms prefer to feed sub-surface when the soil surface is dry. Damage to seedlings is not usually visible until the plants start withering. When planting into dry soil (or when the soil shortly after planting is desiccated) poor cutworm control can be expected as the pest does not come into contact with the product applied to the soil surface. Thus, a follow-up application of **ICHIBAN 100 EW** may not ensure cutworm control unless the soil surface is moist.

RECOMMENDATIONS

CROP/PEST	APPLICATION RATE	REMARKS
All row crops Cutworms (*Agrotis* spp.)	For preventative and corrective treatments: **A. PREVENTATIVE:** 0.2 m ℓ /100m row	For fields with a history of cutworms infestations or where the pest is expected to occur. **Ground application:** **Row treatment:** Apply in 3L water per 100 meter row length and in a 30 cm wide band over the width of the row. If applying **ICHIBAN 100 EW** in a wider band, increase the dosage rate accordingly.
	65 m ℓ/ha	**Overall ground treatment:** Apply in at least 300 L water per hectare.
	65 m ℓ/ha	**Aerial application:** Apply in 30 L water per hectare.
	B. CORRECTIVE 0.15 m ℓ/100 m row	Apply when damage is noticed on 5% or more of seedlings. **Ground application:** **Row treatment:** Refer to instructions as per the preventative treatment above.
	50 m ℓ/ha	**Overall ground treatment:** Refer to instructions as per the preventative treatment above.
	65 m ℓ/ha	**Aerial application:** Apply in 30 ℓ water per hectare.

Cruciferae Diamond back moth larvae (*Plutella xylostella*)	7 m ℓ / 100 ℓ water	**Warning against resistance: Refer to "RESISTANCE MANAGEMENT" above.** Apply the first application when the first signs of the pest are noticed. Apply the follow-up applications with 10 to 14 days intervals. Thorough wetting and penetration of the plants is important. (Refer to **"Instructions for Application"** above). Aphids will be suppressed in a spray programme.
Macadamia Stink bug (*Nezara viridula*)	10 m ℓ / 100 ℓ water	Apply **ICHIBAN 100 EW** as a high volume full cover spray. Apply the first application when the nuts are marble sized (October/November). Apply a follow-up application and possibly a third application with 4-week intervals
Maize African bollworm (*Helicoverpa armigera*)	1 ml / 100 meter row	**Warning against resistance. Refer to "RESISTANCE MANAGEMENT" above.** Apply as soon as the pest is noticed, but not later than 80 % beard emergence. Thorough wetting and penetration of the plants are important. (Refer to **"Instructions for Application"** above.) **Ground application:** Ensure that the row width permits ground application. Apply in minimum 3 litres water per 100 meter row length. Direct nozzles towards the cobs.
	100 ml / ha	**Aerial application:** Apply in 30 litres water per hectare.
Stalk borer (*Busseola fusca*)	**PREVENTIVE against young larvae:** Apply applications on the basis of scouting, as follows: a) Scout 100 plants randomly per field for eggs. b) Scout the fields weekly from 2 weeks post-emergence of the crop until 7 weeks. c) Apply the application 7 to 10 days after 5 % or more plants are infested with eggs. d) If scouting shows that eggs have already hatched, spray immediately. Note that larvae longer than 10 mm and that have already tunnelled into the stalk will not be controlled successfully. e) If scouting later in the season shows infestation, repeat the application. Thorough wetting and penetration of the plants are important. (Refer to **"Instructions for Application"** above.) 1.25 ml / 100 meter row	**Ground application:** Apply in minimum 3 litres water per 100-meter row length. The dosage rates on 1 and 2-meter row widths are respectively 125ml and 62.5 ml per hectare. Direct spray into the funnel.
	125 ml / ha	**Aerial application:** Apply in 30 litres water per hectare.

Tomatoes African bollworm (*Helicoverpa armigera*)	10 ml / 100 l Water 50-100 mL/ha	**Warning against resistance. Refer to "RESISTANCE MANAGEMENT" above.** **Ground application:** Apply as a full cover spray. Commence applications with the first signs of an infestation. Repeat the application at 7 to 10-day intervals or as determined by inspection of the crop. Thorough wetting and penetration of the plants are important. (Refer to **"Instructions for Application"** above.) **High volume:** Apply up to 500 litres spray mixture per hectare to plants smaller than 60 cm. Apply 1000 litres per hectare or more to plants higher than 60 cm (e.g. trellised tomatoes). Do not use more than 100 ml **ICHIBAN 100 EW** per hectare. **Mistblower:** Apply in 150 to 850 litres water per hectare. Use the lower rate and volume for plants smaller than 60 cm high. Use the higher rate and volume for plants taller than 60 cm (e.g. trellised tomatoes). Do not use more than 100 ml **ICHIBAN 100 EW** per hectare.
Potatoes Potato tuber moth (*Phthorimaea operculella*) & Lesser army worm (*Spodoptera exiqua*)	100 ml / ha	**Preventative treatment:** Apply a full cover spray from when the plants are 1 month old. Apply follow-up applications every 8 to 14 days. The crop must be ridged at least twice during the growing season to ensure that tubers are covered by soil. If the crop is to be left in the ground for a period of time before being harvested, precaution must be taken that no cracks in the soil covering the rows, appear. The cracks offer direct access for the moths to the tubers. **Ground application:** Apply in 300 to 500 litres water per hectare, depending on plant size. Ensure thorough penetration and wetting. (Refer to **"Instructions for Application"** above.)

NOTES:

- Cutworms on all row crops: For both preventative and corrective treatments: Apply to a well-prepared seedbed that is free of clods and excessive trash (See the directions below for **"Reduced Tillage Practices".** The soil must be moist at application in order to ensure adequate control. In the case of re-infestation, apply a second application.
- **Reduced Tillage Practices:** In the case of such tillage practices, the cutworm populations must be carefully monitored after the initial application. Since fields under these conditions often have high cutworm populations, a follow-up application may be needed. Apply the corrective follow-up application as an overall ground treatment at the recommended dosage rate.
- Refer to **"USE RESTRICTIONS"** for conditions under which poor cutworm control can be expected.

WAARSKUWINGS
Onthoudingsperiode:
Laat die volgende minimum aantal dae tussen laaste toediening en oes of beweiding van die volgende gewasse toe:

Makadamias.....30 dae
Mielies.....14 dae
Tamaties en Koolgewasse .....4 dae
Aartappels.....21 dae

BELANGRIK: Die aanbevole onthoudingsperiode tussen die laaste toediening en oes voldoen aan die vereistes vir plaaslike residuvlakke, maar mag dalk nie voldoen aan die vereistes vir uitvoer nie.

- Hanteer versigtig.
- Skadelik wanneer ingesluk word sowel as wanneer deur die vel opgeneem
- Irriterend vir die oë, vel en die slymvliese.
- Giftig vir visse en natuurlewe.
- Gebruik hierdie produk slegs volgens aanbeveling sodat die risiko teenoor bye, nuttige parasiete**,** nuttige predatore en visse tot die minimum beperk word.
- Moet nie toedien wanneer bye op hul bedrywigste is nie. Moet nie die spuitnewel op byekorwe rig of toelaat dat spuitnewel daarheen dryf nie.
- Moet nie oor of toelaat dat spuitnewel wegdryf na watersamestellings soos damme, riviere, damme, visteeldamme of strome nie
- Berg in die oorspronklike houer in 'n koel, droë, goed geventileerde plek.
- Hou buite bereik van kinders, oningeligte persone en diere.
- Berg weg van voedsel, voer, saad, kunsmis en ander landbou produkte..
- Moet nie hierdie produk gebruik in enige manier wat strydig met die aanwysings op hierdie etiket nie.
- **ICHIBAN 100 EW** is getoets op die belangrikste kommersiële kultivars sonder enige fitotoksiese effekte. Meer vatbare kultivars mag in die toekoms vrygestel word, waarvoor getoets moet word, daarvoor moet **ICHIBAN 100 EW** op 'n beperkte area getoets word voordat daar kommersiële toedienings gemaak word.
- **Herbetreding**: Moet nie behandelde gebied 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 toestande doeltreffend sal wees nie. Die werking en effek daarvan kan beïnvloed word deur faktore soos abnormale grond-, klimaats- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van die plae teen die betrokke middel, 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 die 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

- Dra 'n gesigskerm en rubberhandskoene tydens die hantering, voorbereiding en toediening van die mengsel.
- Moet nie dampe of spuitnewel inasem nie.
- Voorkom vel-en oogkontak.
- Was met seep en water na gebruik en na toevallige vel kontak.
- Was besoedelde klere na gebruik.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat die hande en gesig gewas is en skoon klere aangetrek is nie.
- Verhoed wegdrywing van die spuitnewel na ander gewasse, weiding, riviere, damme of areas wat nie onder behandeling is nie.
- Maak toedieningsapparaat skoon na gebruik. Gooi die spoelwater uit waar dit nie gewasse, weiding, riviere, damme en boorgate sal besoedel nie.
- Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei.

- Spoel die leë houer drie maal uit op die volgende wyse: Keer die leë houer om oor die spuittenk of mengbak en dreineer vir minstens 30 sekondes nadat die vloei tot ‘n drup verminder het. stadiger. Spoel die leë houer daarna driekeer uit met 'n volume water wat gelykstaande aan 'n minimum van 10% van die inhoud van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer vernietig word.
- Vernietig die leë houer deur gate en plat te slaan en doen weg daarmee op 'n veilige manier.
- Moet nooit die leë houer vir enige ander doel gebruik nie.

SIMPTOME VAN VERGIFTIGING

Gevoelloosheid en tinteling van die hande en voete. Long edeem en stuiptrekkings.

NOODHULPBEHANDELING

SOEK ALTYD BEHANDELING DEUR ‘N DOKTER ONMIDDELIK

Verwyder die pasiënt van die bron van vergiftiging AF na vars lug en hou hom kalm en gerusgestel.
Velkontak: Verwyder besoedelde klere sagkuns, sowel as skoene. Was besmette liggaamsdele met 'n gladde seep en baie water. Persone wat noodhulp gee moet handskoene dra om self-besmetting te voorkom. Indien irritasie voortduur, kry mediese hulp.
Oogkontak: Spoel die oë onmiddellik uit met ‘n groot hoeveelhede skoon water vir ten minste 15 minute. Lig die boonste en onderste ooglede. **Konsulteer met 'n oogspesialis.**
Ingesluk: Indien ingesluk, spoel die mond uit met water en gee die pasiënt baie water om te drink (as bewuste) en **MOET NIE** braking veroorsaak nie. **Kry mediese hulp en toon hierdie etiket aan die dokter.**

NOTA AAN GENEESHEER:

Behandel simptomaties (reinig, belangrikste funksies). Daar is geen bekende teenmiddel.

WERKING:

Ichiban 100 EW werk deur die voorkoming van transmissie van impulse deur die senuwee membrane, by wyse van die weg te blok vir sodium ione deur kanale in die senuwee membrane, dus die voorkoming van die aanstuur van aksons
Die vergiftiging lei gewoonlik in 'n vinnige uitklop en gevolglike sterfte. **Ichiban 100 EW** is 'n nie-sistemiese insekdoder met kontak- en maag aksie. Dit werk op die sentrale en perifere senuweestelsel teen baie lae dosisse.

WEERSTANDSWAARSKUWING

Vir weerstand bestuur, is **Ichiban 100 EW** 'n Groepkode 3 insekdoder. Enige populasie van 'n spesifieke insek mag individue insluit wat 'n natuurlike weerstand teen **Ichiban 100 EW** of enige ander Groepkode 3 insekdoder het. Hierdie weerstandbiedende individue kan uiteindelik die insekpopulasie oorheers as hierdie insekdoders herhaaldelik aangewend word. Hierdie weerstandbiedende insekte sal waarskynlik nie deur **ICHIBAN 100 EW** of enige ander Groepkode 3 insekdoder beheer word nie.

Om weerstand teen insekdoders te vertraag:

- Vermy die eksklusiewe herhaaldelike gebruik van insekdoders in dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van produkte in verskillende insekdoder groepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in insekdoderprogramme.

Aangesien die voorkoms van weerstand nie voorspel kan word nie, word gebruikers aangeraai om behandelde gewasse onder streng observasie hou. Indien die behandeling nie doeltreffend is nie as gevolg van die gebruik van **Ichiban 100 EW** soos aanbeveel, mag 'n weerstandbiedende ras teenwoordig wees. As 'n weerstandbiedende ras positief geïdentifiseer word, moet oorweging daaraan geskenk word om die vinnige gebruik van ‘n insekdoder met 'n ander modus van aksie, waarvoor daar geen rekord van weerstand teen die betrokke insekdoder is nie. Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

WEERSTANDSBESTUUR

- Bestandheid van die Afrika bolwurm (*Helicoverpa armigera*) teen sintetiese piretroïede is bevestig. As deel van 'n strategie om die ontwikkeling van grootskaalse bestandheid te voorkom, moet die volgende riglyne nagevolg word vir die beheer van *Helicoverpa armigera*:
- Moet nie meer as 2 toedienings per seisoen toedien nie.
- **Vir die optimale beheer van vatbare bolwurm populasies, moet die larwes nie 10 mm in lengte oorskry ten tye van toediening nie.**
- As 'n piretroïede bespuitings swak beheer gee, moet nie met enige sintetiese piretroïed (selfs teen 'n korrektiewe dosis) oorspuit nie. Gebruik 'n produk uit 'n ander chemiegroep.

GEBRUIKSAANWYSINGS
Gebruik slegs soos aangedui

MENGSINSTRUKSIES

Maak die spuittenk half-vol met skoon water. Skud die houer deeglik voor gebruik. Die doeltreffendheid van **Ichiban 100 EW** kan benadeel word deur baie harde water (> 1000 dpm. Opgeloste stowwe) en / of water met 'n hoë pH-waarde te gebruik. Gebruik 'n geskikte buffer teen die geregistreerde dosis om die pH van die water aan te pas. Hierdie buffer moet met water gemeng word voor die byvoeging van **Ichiban 100 EW**.
Neem ongeveer 10 L van hierdie pH korrekte water uit die mengtenk en meng deeglike daarby die benodigde volume van **Ichiban 100 EW**
Indien enige ander produkte met **Ichiban 100 EW** gemeng gaan word, moet die benodigde volume van hierdie produk op soortgelykte wyse eers vooraf gemeng word.
Die byvoeging van molasse verminder die pH sowel as die verdamping van die spuitnewel. Vir grondtoediening, voeg 10% molasse per volume. Vir lugtoediening, voeg 20% molasse per volume.
Roer die water in die spuittenk en voeg die produk / te by die tenk in die volgende volgorde soos van toepassing:
Geskikte buffer, suspensie konsentraat, wateroplosbare konsentraat, emulgeerbare konsentraat.
Vul die tenk met water tot die verlangde vlak terwyl daar voortdurend geroer word. Handhaaf roering gedurende toediening. **Tenkmengsels moet onmiddellik uitgespuit word en nie toegelaat word om in die spuittenk oornag te staan**. Spuittoerusting moet deeglik uitgespoel word aan die einde van die toediening.

VERENIGBAARHEID

Die verenigbaarheid van **Ichiban 100 EW** met ander produkte hang af van die formulasie van die betrokke produkte asook die kwaliteit van die spuitwater. As gevolg van die veranderinge in formulerings word dit aanbeveel dat 'n fisiese verenigbaarheidstoets uitgevoer word voor die tenkmengsel aangemaak word. Moet nie **ICHIBAN 100 EW** met ander chemikalieë vermeng, tensy die gebruik vooraf getoon het dat die kombinasie fisies verenigbaar is en nie skadelik vir gebruik onder normale toestande is nie. Indien **ICHIBAN 100 EW** in kombinasie met enige ander landboumiddels gebruik word, moet al die etiketaanwysings van daardie betrokke produkte gevolg word.

Moet nie **Ichiban 100 EW** met seewierekstrakte, amitras, chinometionat, dodien, protiofos en vamidothion meng nie.

TOEDIENINGSMETODES
Verseker dat die spuittoerusting korrek gekalibreer is en gereeld gedurende toediening nagegaan egalige en akkurate toediening te verseker. **Konstante roering deur die hele spuitoperasie is noodsaaklik.**
Gebruik slegs skoon water.

INSTRUKSIES VIR AANSOEK

- Indien **Ichiban 100 EW** op gewasse met hoë digtheid toegedien word, mag die doeltreffendheid van die spuitmengsel nadelig beïnvloed word. Verseker dus dat deeglike penetrasie en benatting.
- Monitor die doeltreffendheid van die toediening binne 3 dae na bespuiting. 'n Verdere bespuiting mag nodig wees indien onbevredigende beheer verkry is.
- Bolwurm motte word tot ‘n sekere mate deur **Ichiban 100 EW** afgeweer, daarom kan dit verwag word dat minder eiers gelê word op behandelde plante.
- **Ichiban 100 EW** sal die afwas deur reën weerstaan, indien die spuitmengsel toegelaat word om heeltemal op die plante droog te word.

- Alle toerusting moet geskik wees, in goeie werkende toestand en korrek gekalibreer is ten einde die benodigde bedekking vir die betrokke toedieningsmetode te verkry.

LUGTOEDIENING
Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van STANSA Kode 0118 (Aerial Application of Agricultural Pesticides) gedoen word. Dit is belangrik om te verseker dat die spuitmengsel eweredig oor die teikenarea versprei word en dat die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is dus belangrik om aan volgende kriteria te voldoen:

Toerusting:

- Gebruik geskikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker.
- Die operateur moet 'n stelsel kies wat 'n druppelspektrum met die kleinste moontlike relatiewe span sal produseer.
- Al die spuitneuse of atomiseerders moet in die binneste 75% van die vlerkspan geplaas word om die beweging van druppels in die vlerkvorteks in te verhoed.

Toedieningsparameters:

- 'n Minimum volume van 30 ℓ spuitmengsel per hektaar word aanbeveel. Aangesien hierdie produk nie teen 'n verlaagde volume getoets is nie, kan die registrasiehouer nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, uit die lug toegedien word nie.
- 'n Druppelbedekking van 30-40 druppels per cm^2 moet op die teikenarea herwin word.
- Dit word aanbeveel om gebruik te maak van 'n druppelspektrum met 'n VMD van 250-280 mikron. Verseker dat die produksie van fyn druppels (kleiner as 150 mikron) tot 'n minimum beperk word.
- Die hoogte van die spuitbalk moet op 3-4 meter bo die teiken gehandaaf word.
- Moet nie spuit wanneer die vliegtuig in 'n klim, aan die bopunt is van, of tydens 'n duik, of terwyl uitklim of draai nie.

Meteorologiese toestande:

- Die verskil in temperatuur tussen die nat-en droëbollesing, soos met 'n swaaihigrometer bepaal, moet nie 8 ° C oorskry nie.
- Moet nie toedien tydens turbulente, onstabiele en droë toestande gedurende die hitte van die dag wanneer styg en dalende konveksie windbeweging plaasvind nie.
- Moet nie toedien onder temperatuur inversie toestande (deur bo of binne die inversie laag te spuit) nie as dit kan lei tot die volgende:

    a) Verlaagde effektiwiteit as gevolg van die suspensie en verdamping van klein druppels in die lug (Onvoldoende bedekking op teiken),
    b) Skade aan ander sensitiewe gewasse en / of nie-teiken areas as gevolg van wegdrywing van die spuitnewel weg van die teiken area af.

- Moet nie spuit indien die windspoed 15 km / h oorskry nie.

Algemeen:
- Verseker dat die lande wat behandel sal wees, akkuraat gemerk word en dat die lugbespuitingsoperateur presies weet watter lande gespuit moet word.
- Verkry ‘n versekering van die lugbespuitingsoperateur dat aan die bogenoemde vereistes voldoen sal word.

GEBRUIKSBEPERKINGS

- **Waarskuwing teen bestandheid**: Verwys na die **"WEERSTANDSWAARSKUWING"** en **"WEERSTANDSBESTUUR"** soos hierbo uiteengesit.
- Snywurms is geneig om ondergronds te voed indien die grondoppervlak droog is. Skade aan saailinge is gewoonlik nie sigbaar alvorens die plante begin verkwelk nie. Indien daar in droë grond geplant word (of die grond kort na plant vinnig uitdroog) kan swak beheer van snywurm verwag word, aangesien die plaag nie met die produk op die grondoppervlak in aanraking kom

nie. Opvolgbespuiting van **Ichiban 100 EW** sal nie noodwendig verseker nie, tensy die grondoppervlak klam is.

GEWAS/PLAAG	DOSIS	Opmerkings
Alle rygewasse Snywurms (*Agrotis* spp.)	Vir voorkomende en korrektiewe behandeling: **A. VOORKOMEND:** 0.2 m ℓ /100m ry	Vir lande met 'n geskiedenis van snywurms besmetting of waar die plaag verwag om plaas te vind. **Grondtoediening:** **Ry behandeling**: Dien toe in 3L water per 100 meter rylengte en in 'n 30 cm breë band oor die wydte van die ry. Indien **Ichiban 100 EW** in 'n breër band toegedien word, verhoog die dosis ooreenkomstig
	65 m ℓ/ha	**Algehele grondbehandeling**: Dien toe in ten minste 300 L water per hektaar.
	65 m ℓ/ha	**Lugtoediening:** Dien toe in 30 L water per hektaar.
	B. KORREKTIEF 0.15 m ℓ/100 m ry	Dien toe wanneer skade op 5% of meer saailinge waargeneem word. **Grondtoediening:** **Rybehandeling:** Verwys na instruksies soos vir voor-opkoms rybehandeling.
	50 m ℓ/ha	**Algehele grondbehandeling:** Verwys na instruksies soos per die voorkopkoms behandeling hierbo.
	65 m ℓ/ha	**Lugtoediening:** Dien toe 30 ℓ water per hektaar.
Koolgewasse Ruitrugmot larwes (*Plutella xylostella*)	7 m ℓ / 100 ℓ water	**Waarskuwing teen bestandheid: Verwys na "WEERSTANDBESTUUR" hierbo.** Dien die eerste toediening toe wanneer die eerste tekens van die plaag opgemerk word. Dien opvolgbespuitings toe met 10 tot 14 dae intervalle. Deeglike benatting en penetrasie van die plante is belangrik. (Verwys na "**Instruksies vir Toediening**" hierbo). Plantluise sal in 'n spuitprogram onderdruk word.
Makadamia Stinkbesie (*Nezara viridula*)	10 m ℓ / 100 ℓ water	Dien **ICHIBAN 100 EW** toeas 'n hoë volume voldekbespuiting. Dien die eerste bespuiting toe wanneer die neute albastergrootte is(Oktober / November). Dien 'n opvolgtoediening toe en 'n moontlike derde toediening met 4 weke intervalle.
Mielies Afrika bolwurm (*Helicoverpa armigera*)	1 ml / 100 meter ry	**Waarskuwing teen bestandheid: Verwys na "WEERSTANDBESTUUR" hierbo.** Dien die eerste toediening toe wanneer die eerste tekens van die plaag opgemerk word, maar nie later as 80 % baardverskyning nie. Deeglike benatting en penetrasie van die plante is belangrik. (Verys na "**Instruksies vir Toediening"** hierbo). **Grondtoediening:** Verseker dat die rywydtes grondtoediening toelaat. Dien toe in minimum 3 liter water per 100 meter rylengte. Rig spuitneuse na die koppe. .
	100 ml / ha	**Lugtoediening:** Dien toe in 30 liter water per hektaar.

Strondboorder (*Busseola fusca*)	**VOORKOMEND teen jong larwes:** Dien toedienings toe op die basis van die verkenning, soos volg: a) Verken 100 ewekansige plante per land vir eiers. b) Verken die lande weekliks vanaf 2 weke na-opkoms van die gewas tot 7 weke. c) Dien die toediening toe 7 tot 10 dae nadat die verkenning toon dat 5% of meer van die plante met eiers besmet is. d) Indien verkenning toon dat eiers reeds uitgebroei het, spuit onmiddellik. Let op dat larwes groter as 10 mm en wat reeds die stam binnegedring het, nie suksesvol beheer word nie. e) Indien die verkenning later in die seisoen weer besmetting toon, herhaal die toediening. Deeglike benatting en penetrasie van die plante is belangrik. (Verwys na "**Instruksies vir Toediening**" hierbo.) 1.25 ml / 100 meter ry	**Grondtoediening:** Dien toe in minimum 3 liter water per 100 meter rylengte. Die dosisse op 1 en 2 meter rywydtes is onderskeidelik 125 ml en 62.5 ml per hektaar. Rig die bespuiting in die kelk in.
	125 ml / ha	**Lugtoediening:** Dien toe in 30 liter water per hektaar.
Tamaties Afrika bolwurm (*Helicoverpa armigera*)	10 ml / 100 l Water 50-100 mL/ha	**Waarskuwing teen bestandheid: Verwys na "WEERSTANDBESTUUR" hierbo.** **Grondtoediening** Dien toe as 'n voldekbespuiting. Begin bespuitings met die eerste tekens van 'n besmetting. Herhaal die toediening elke 7 tot 10 - dae of soos bepaal deur inspeksie van die gewas. Deeglike benatting en penetrasie van die plante is belangrik. (Verwys na "**Instruksies vir Toediening**" hierbo.) **Hoë volume:** Dien tot 500 liter spuitmengsel per hektaar toe op plante kleiner as 60 cm. Dien 1000 liter per hektaar of meer toe op plante hoër as 60 cm (bv. opgeleide tamaties). Moet nie meer as 100 ml **ICHIBAN 100 EW** per hektaar gebruik nie. **Newelblaser:** Dien toe in 150-850 liter water per hektaar. Gebruik die laer dosis en volume op plante kleiner as 60 cm hoog. Gebruik die hoër dosis en volume op plante groter as 60 cm (bv. opgeleide tamaties). Moet nie meer as 100 ml **ICHIBAN 100 EW** per hektaar gebruik nie.
Aartappels Aartappelmot (*Phthorimaea operculella*) & Klein kommandowurm (*Spodoptera exiqua*)	100 ml / ha	**Voorkomende behandeling:** Dien 'n voldekbespuiting toe sodra die plante1 maand oud is. Dien opvolgbespuitings toe elke 8 tot 14 dae. Die gewas moet ten minste twee keer opge-erd gedurende die seisoen, om te verseker dat die knolle met grond bedek is. Indien die gewas vir 'n periode in die grond gaan lê voor ge-oes word, moet voorsorg getref word dat geen krake in die grond oor die rye, voorkom nie. Die krake bied toegang vir motte na die knolle.

		Grondtoediening: Dien toe in 300 tot 500 liter water per hektaar, afhangend van plangrootte. Verseker deeglike penetrasie en benatting. (Verwys na "**Instruksies vir Toediening**" hierbo.)

NOTAS:

- Snywurms oor alle rygewasse: Vir voorkomende en korrektiewe behandeling: Dien toe op 'n goed voorbereide saadbed wat vry van kluite en oormatige plantreste is (Sien die aanwysings hieronder vir "**Minimum bewerkingspraktyke**" Die grond moet klam wees by die aansoek om voldoende beheer te verseker. In die geval van herbesmetting, moet 'n tweede bespuiting toedien word.
- **Minimum bewerkingspraktyke**: In die geval van sodanige bewerkingspraktyke, moet die snywurmgetalle noukeurig gemonitor word na die aanvanklike aansoek. Aangesien lande onder hierdie toestande dikwels 'n hoë snywurmgetalle het, kan 'n opvolgtoediening nodig wees. Dien toe die korrektiewe opvolg bespuiting as 'n algehele behandeling teen die aanbevole dosis.
- Verwys na "**GEBRUIKSBEPERKINGS**" vir die toestande waaronder swak snywurm beheer kan verwag word.