

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Herbicide



GRANTRON 750 WDG

Reg. No. L 10706 Act/Wet No. 36 of/van 1947

2-17/2021 - Mar2021

*A water dispersible granule herbicide for selective control of weeds in crops as indicated.*

*'n Water disperseerbare korrel onkruidodder vir selektiewe beheer van onkruid in gewasse soos aangedui.*

**ACTIVE INGREDIENT / AKTIEWE BESTANDEEL**

mesotrione (callistemone) **750 g/kg** mesotrioon (callistemoon)

HRAC HERBICIDE GROUP CODE **F2** HRAC ONKRUIDODDER GROEPPKODE

kg

**villa**

Registration holder / Registrasiehouer:

Villa Crop Protection (Pty) Ltd.

Co. Reg. No. / Mpy. Reg. Nr. 1992/002474/07

PO Box / Posbus 10413, Aston Manor, 1630

Tel: 011 396 2233

Website / Webblad: [www.villacrop.co.za](http://www.villacrop.co.za)

UN Number: 3077

Willow Set & Print 011 394-4486



CAUTION  
VERSIGTIG



GEBRUIKSAANWYINGS INGESLUIT

VERWYS NA BESONDERHEDE  
GEDRUK OP HOUER/SAK

Date formulated:

Formuleringsdatum:

DIRECTIONS FOR USE ENCLOSED

REFER TO DETAILS PRINTED  
ON CONTAINER/BAG

Batch number:

Lotnommer:

**GRANTRON 750 WDG**

Reg. No. L 10706 Act/Wet No. 36 of/van 1947

HRAC HERBICIDE GROUP CODE / HRAC ONKRUIDDODER GROEPKODE: F2

**ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:**

mesotrione (callistemone) / mesotrioon (callistemoon)..... 750 g/kg

Registration holder / Registrasiehouer:

**VILLA CROP PROTECTION (PTY) LTD.**

Co. Reg. No. 1992/002474/07 Mpy. Reg. Nr.

P.O. Box / Posbus 10413, ASTON MANOR, 1630,

Tel. (011) 396 2233

**CAUTION / VERSIGTIG****WARNINGS****Withholding periods:**

Minimum time between the last application and harvest or grazing:	
Maize ( <b>Note: Not for use in sweet corn or popcorn</b> )	56 days

- Very toxic to aquatic life with long lasting effects.
- Store in a dry, cool, well-ventilated place away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area until spray deposit has dried, unless wearing protective clothing.

**Aerial application:**

Notify all inhabitants in the immediate vicinity of the lands to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

**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 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 weeds 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 event of any uncertainty.**

**PRECAUTIONS**

- Avoid inhalation of the dust or spray mist.
- Avoid contact with skin and eyes.
- The employee must wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.
- The use of chemically protective gloves is recommended to prevent against skin contact.
- This product is not likely to cause eye irritation, but as a safety measure, the use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.
- Wash with soap and water after use and accidental skin contact.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing and applying or before washing hands and face or change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams and areas not under treatment or to nearby water sources.
- **Cleaning of application equipment:** Special attention and care must be taken with cleaning of all equipment used in the mixing and application of **GRANTRON 750 WDG**, before using it for applications in other crops.
- When applying **GRANTRON 750 WDG** in a tank mixture with **Halo 750 WDG** or **Nicoron 750 WDG**, please consult the respective labels for “**Cleaning of Application Equipment**” instructions.

- **Product and container disposal:**

- Dispose of surplus product in an incinerator or on a landfill site approved for pesticides.
- Do not bury in, or spray onto, any area under agricultural use.
- Dispose of containers/bags/sachets made of plastic, cardboard or paper on a landfill site approved for pesticides or burn in a safe place where there is no risk of contamination by smoke and fumes.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Destroy the container by perforation and flattening and dispose of it in a safe way.
- **Do not** re-use the empty container for any other purpose.

### **RESISTANCE WARNING**

**GRANTRON 750 WDG** is a group code F2 herbicide. Any weed population may contain individuals naturally resistant to **GRANTRON 750 WDG** and other group code F2 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **GRANTRON 750 WDG** or any other group code F2 herbicide.

To delay herbicide resistance:

- avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different herbicide group codes,
- integrate other control methods (chemical, cultural, biological) into weed control programmes.

For specific information on resistance management contact the registration holder of this product.

### **DIRECTIONS FOR USE: Use only as indicated.**

#### **Compatibility:**

**GRANTRON 750 WDG** is compatible with the following products: **Palladium Plus 915 EC / Pentium Plus 915 EC, Platinum Plus 915 EC / Metolachlor 915 EC, Palladium 960 EC / Pentium 960 EC, Platinum 960 EC / Metolachlor 960 EC, Palladium Ultra 660 SC / Pentium Ultra 660 SC, Halo 750 WDG, Nicoron 750 WDG, Terbutide Duo 900 WDG, Leap 840 EC, Acetochlor 900 EC, TERBUSIEN SUPER 600 SC** (L 5435 / N-AR 1110) (**Atrazine + Terbutylazine**), **Villa 51 and INTERLOCK®** (L 10254 / W 130875 / N-AR 1856).

- If tank mixtures with other products are made, first confirm compatibility by mixing small volumes of the products in the correct ratio with the appropriate quantity of water.
- Water quality and formulation properties of other products may influence compatibility.

#### **Mixing instructions:**

- Half fill the spray tank with clean water.
- Pre-mix the required amount of **GRANTRON 750 WDG** separately and then add through a 50-mesh sieve to the tank, while agitating.
- When **GRANTRON 750 WDG** is tank mixed with other pesticides, the **GRANTRON 750 WDG** should be mixed first using a tank half filled with water and agitated well, after which the spray tank should be filled almost to capacity with water, followed by the other products.
- Maintain agitation during mixing and application.
- Prepared spray mixtures must not be left in the spray tank for any length of time, e.g., overnight.
- Mixing sequence for tank mixtures: first add any buffer (only if recommended on any label) followed by soluble dry formulation such as soluble granules (SG's). Then add **GRANTRON 750 WDG** to the water. Next add SC's (suspension concentrates). Then add EC formulations (emulsifiable concentrates). Lastly add a surfactant (post-emergence applications only), e.g., **Villa 51** or a drift controller/canopy penetrator such as **Interlock®**. Thereafter, fill the tank with water to the required final volume. Ensure agitation throughout the mixing and application process.
- Apply **GRANTRON 750 WDG** the same day that the spray mixture was prepared.

**USE RESTRICTIONS**

- All recommendations on this label should be followed. **Do not** make any changes to dosage rates, product combinations or adjuvants, indicated on this label.

**Re-cropping intervals when applying as part of a tank mixture \*:**

Grain sorghum	2 months
Potatoes	6 months
Soybeans, Dry beans and Groundnuts	9 months
Sunflowers and Cotton	9 months
Wheat and Barley	1 month
All other crops not listed above	24 months

\* pre-plant interval = time period between the last application of **GRANTRON 750 WDG** and the anticipated date of planting of a follow-up crop.

- When applying **GRANTRON 750 WDG** in any tank mixture, please consult the respective labels for re-cropping intervals etc.
- Only plant a follow-up crop after thorough cultivation of the soil.
- GRANTRON 750 WDG** is metabolized through microbial activity. Extended periods of low microbial activity might prolong the residual activity of in the soil.

**General restrictions:**

- Do not apply products containing the active ingredients **Flumetsulam** (e.g., **LAUREL 800 WDG / Flumetsulam 800 WDG**) or **Imazethapyr** (e.g., **Mallet 100 SL / Imazethapyr 100 SL**) in dry beans, if maize has been treated with **Mesotrione**-containing products e.g., **GRANTRON 750 WDG**, in the same field during the previous season, as it may harm the dry bean crop. Under certain conditions (not yet quantified) soybeans may also be affected adversely.
- GRANTRON 750 WDG** may not be applied to inbred parent lines of maize hybrids or recently released cultivars, popcorn or sweet corn. First consult with the seed company or your chemical supplier.
- Disturbing the soil following either pre- and/or post-emergence applications may result in reduced weed control due to re-germination of weeds.
- Prevent drift of **GRANTRON 750 WDG** to adjacent crops. Smaller droplet sizes, prone to drift, must be avoided. **Interlock®** may be added to discourage the formation of smaller droplet sizes and limit drift.
- Avoid overlapping of spray swaths.

**IMPORTANT – Use of GRANTRON 750 WDG with regard to organophosphate or carbamate insecticides:**

- Do not apply **GRANTRON 750 WDG** post-emergence within four (4) weeks of an organophosphate or carbamate soil insecticide application at planting (e.g., **Terbufos, Carbofuran**).
- Do not** make tank mixtures of **GRANTRON 750 WDG** with organophosphate (e.g., **Chlorpyrifos**) or carbamate (e.g., **Benfuracarb**) insecticides as the crop may be damaged.

**Do not** apply a foliar application of an organophosphate or carbamate insecticide treatment within one (1) week before or after an **GRANTRON 750 WDG** application as the crop may be damaged.

**Possible damage to triazine sensitive crops**

- Where soils have been treated with lime to correct the soil pH, the possibility of crop damage increases dramatically in fields where triazines were previously applied. Refer to the product labels of relevant triazine herbicides used.

**Possible increased efficacy, phytotoxicity and residual action**

- Where soil pH levels are increased above seven (7), conditions for increased efficacy and reduced selectivity may take place. Also, increased soil pH may result in increased soil residual action of certain herbicides, affecting follow-up crops.
- Where pH adjustments have been done, caution must be taken where **Sulphonyl urea** herbicides (e.g., **Nicosulfuron**), **Triazolopyrimidine sulfonanilide** herbicides and **Imidazolinone** herbicides (e.g., **Flumetsulam**), which are all sensitive to soil pH fluctuations, have been, or are expected to be used.
- Contact your agrichemical representative to determine suitable crop rotation and weed control programmes before making any soil pH adjustments.**

**Pre-emergence application restrictions:**

- Precipitation of 10 to 20 mm (rain or irrigation) following application, is required for activity, to move the herbicide in to the germination zone of weed seed. Reduced weed control is possible if this does not occur within 2 weeks after application.
- Poor weed control may be obtained where reduced tillage practices are followed, or on soils with high organic matter content due to the active ingredient being trapped on stubble or organic matter, especially under low rainfall conditions.
- Do not apply **GRANTRON 750 WDG** where flood irrigation is used.
- Ensure that the seedbed is well prepared – i.e., fine, free of clods and with no germinating or established weeds.
- **Do not** apply **GRANTRON 750 WDG** under stress conditions such as low pH, water-logged soils due to excessive rainfall, severe cold spells, inadequate fertilization, etc.
- If dry soil conditions exist for prolonged periods following pre-emergence application of **GRANTRON 750 WDG**, reduced control of germinating weeds may occur.
- Use the higher application rates of **Palladium Plus 915 EC / Pentium Plus 915 EC** or **Platinum Plus 915 EC / Metolachlor 915 EC** for improved control of *Cyperus esculentus* (Yellow nutsedge), or for improved control of heavy infestations of *Digitaria sanguinalis* (Crab fingergrass), or where **Palladium Plus 915 EC / Pentium Plus 915 EC** is pre-plant incorporated, or where organic matter in the soil exceeds 1.0 %.

**Post-emergence application restrictions:**

- Apply **GRANTRON 750 WDG** to actively growing weeds that are not under growth stress. Reduced or delayed weed control may occur if weeds are under stress conditions such as heat, droughts, flooding, prolonged cool temperatures, or inadequate fertilization, since weeds may not be growing actively.
- Delay application of **GRANTRON 750 WDG** until the stress conditions have improved, and ensure weeds are actively growing and within the susceptible growth stages as indicated below.
- Apply **GRANTRON 750 WDG** on to the true leaves of the weeds, as cotyledons of seedlings are not true leaves.
- Temporary bleaching injury to the crop may occur when the crop is under stress, under extreme weather conditions or prolonged overcast conditions.
- **Do not** apply mixtures of **GRANTRON 750 WDG** with foliar applied (e.g., **Chlorpyrifos**) or carbamate (e.g., **Benfuracarb**) insecticides.
- **GRANTRON 750 WDG** may not be applied post-emergence through any irrigation system.
- Control of *Bidens* spp. may not always be optimal due to germination of seed late in the season when the herbicides' active ingredients have broken down to sub-optimal levels or due to leaching of the products as a result of precipitation (rain/irrigation).

**APPLICATION INSTRUCTIONS****Ground application:** (also refer to “**General Restrictions**” above):

- Apply with a correctly calibrated tractor-mounted boom sprayer that is in good working order.
- The use of low drift 110° flat fan hydraulic nozzles are recommended to obtain the best coverage.
- Apply 200 to 300 litres spray mixture per hectare.
- Pre-emergence application at a reduced volume of 100 litres spray volume per hectare may only be done with hydraulic nozzles or post-emergence applications with sleeve boom sprayers, if **purpose designed low volume ground spraying equipment**, with the correct nozzle types, sizes and spacing, is used and adequate coverage is obtained.
- For post-emergence applications, refer to the correct use of registered adjuvants at the correct rates.
- When using a sleeve boom sprayer, ensure that the airflow system works correctly in order to obtain complete coverage of the target weeds.
- Sleeve boom sprayers **may not** be used for pre-emergence applications of **GRANTRON 750 WDG**.

**Application through irrigation system - centre pivot application:** (also refer to “**General restrictions**” above):

- **May only be used for pre-emergence application in maize within two (2) days of planting.**
- Ensure that the chemigation system is a purpose-designed, calibrated centre pivot irrigation system, equipped with an injector system, which is in good working order.
- Avoid contamination of boreholes or dams by means of spillages of chemicals in the irrigation system. The injector pump, as well as the water pump, must be equipped with valves to stop injection the moment the pivot stops moving forward. It is recommended to inject the chemicals at the centre or

close by. The main water supply line must also be equipped with a non-return valve in order to avoid treated water from flowing back into the supply source.

- Determine the correct injection rate and confirm it is correctly injected by the system.
- **GRANTRON 750 WDG** can be applied in combination with an acetanilide pre-emergence herbicide as mentioned under “**APPLICATION RATES**”.
- Do not apply **GRANTRON 750 WDG**, and tank mixtures with complementary acetanilide herbicides, through the irrigation water in wind speeds higher than 15 km per hour.
- Apply 165 g **GRANTRON 750 WDG** plus 650 ml **Platinum Plus 915 EC / Metolachlor 915 EC** in 5 mm to 8 mm irrigation water per hectare.
- **GRANTRON 750 WDG** can be applied in combination with an acetanilide pre-emergence herbicide as mentioned under “**APPLICATION RATES**”, as well as in combination with **Lambda 50 EC / Judo 50 EC** at 70 ml per hectare for the control of Cutworms.
- Avoid overdosing and possible crop damage by monitoring the overlap area at the end of the cycle.
- Avoid over application of the chemicals because of breakages or stoppages during application through the centre pivot system.
- Ensure that the application and distribution of **GRANTRON 750 WDG** will be equal to that of the irrigation water.
- After application of **GRANTRON 750 WDG** over the complete centre pivot area, apply the following water volumes.

Soil clay %	mm of water / ha
Less than 20 %	10
20 to 35 %	15
More than 35 %	20

- The soil must remain wet for 7 to 14 days after application.

**Aerial Application:** (only pre-emergence applications on maize; also refer to “**General restrictions**” above):

Aerial application of **GRANTRON 750 WDG** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). 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 be met:

- **The use of a suitable drift retardant adjuvant such as Interlock® and/or low drift nozzles (e.g., straight stream nozzles) is recommended. In the case of fixed-wing aircraft flying at a speed faster than 130 mph, the maximum deflection angle of the nozzles or spray stream, as measured from a horizontal straight backwards orientation, may not exceed 30 degrees. In the case of slower flying fixed wing aircraft, the maximum deflection angle, as described above, may not exceed 55 degrees.**
- **Volume:** A spray mixture volume of 30 to 50 litres per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- **Droplet coverage:** Droplet coverage of 20 to 30 droplets per cm<sup>2</sup> must be recovered at the target.
- **Droplet size:** A droplet spectrum with a VMD of 350 to 400 micron is recommended. Ensure that the production of fine droplets (less than 150 micron with high drift & evaporation potential) is restricted to a minimum.
- **Flying height:** The height of the spray boom should be maintained at 3 to 4 metres above the target. Do not spray when aircraft is in a climb, at the top, during a dive, or when banking.
- Only use hydraulic nozzles that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product either through endodrift (within target field) or exodrift (outside target field). The operator must use a setup that will produce a droplet spectrum with the lowest possible Relative Span. All nozzles/atomizers should be positioned within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Aerial application of this product must not be done under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur.

- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
  - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
  - damage to other sensitive crops and or non-target areas through the movement of the suspended spray cloud away from the target field.
- Ensure that the 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 relevant data will be compiled in a spray log and kept for future reference.

#### **Application recommendations:**

- Use accurately calibrated equipment with properly arranged suitable nozzles and an efficient agitation mechanism.
- Prepare a fine, even and firm seedbed, free of weeds, trash and clods.
- Apply **GRANTRON 750 WDG** or its tank mixtures preferably at planting or immediately after planting, but not later than (3) three days after planting. Use 200 litres spray mixture per hectare for overall ground application, and 30 to 50 litres per hectare for aerial application.
- **GRANTRON 750 WDG** must be shallowly incorporated into the soil early in the season, to ensure reliable weed control.
- 10 to 20 mm rain within 7 to 10 days after application is necessary for good results.
- Under dry conditions, weed seedlings may emerge. These are usually stunted and can be controlled with a shallow cultivation, which also mixes the herbicide with the top 10 to 20 mm of soil.
- If soil crusting becomes a problem, rotary harrow in the same direction the rows are planted, to assist crop germination.
- Harrowing after application may reduce weed control if untreated soil is thrown into deep planter furrows.
- Ensure that sufficient fertilizer is placed near the seeds at planting, to promote vigorous seedling growth.

#### **APPLICATION RATES**

#### **IMPORTANT NOTES**

Refer to **USE RESTRICTIONS, DIRECTIONS FOR USE** and **APPLICATION INSTRUCTIONS** above.

- Control of listed weeds can be obtained for 4 to 8 weeks if **GRANTRON 750 WDG** is applied according to instructions.
- **GRANTRON 750 WDG** can be applied pre- or post-emergence of either the crop or the weeds.

**1. Pre-emergence application of GRANTRON 750 WDG plus Palladium Plus 915 EC / Pentium Plus 915 EC, Platinum Plus 915 EC / Metolachlor 915 EC or Palladium Ultra 660 SC / Pentium Ultra 660 SC in maize:**

**NOTES**

- Follow this pre-emergence application after approximately 35 to 42 days with a post-emergence application of registered mixtures of **GRANTRON 750 WDG** plus Acetanalides (**Palladium 960 EC / Pentium 960 EC or Platinum 960 EC / Metolachlor 960 EC**) plus Terbusien Super 600 SC plus Villa 51, as instructed on the relevant labels.
- Control of Yellow nutsedge (*Cyperus esculentus*):** The dosage rates of **GRANTRON 750 WDG** plus **Palladium Plus 915 EC / Pentium Plus 915 EC, Platinum Plus 915 EC / Metolachlor 915 EC or Pentium Ultra 660 SC**, as indicated below, may provide insufficient control of Yellow nutsedge. Refer to the **Palladium Plus 915 EC / Pentium Plus 915 EC or Pentium Ultra 660 SC** labels for dosage rates whereby improved control of Yellow nutsedge is obtained.
- Refer to the **Palladium Plus 915 EC / Pentium Plus 915 EC, Platinum Plus 915 EC / Metolachlor 915 EC or Pentium Ultra 660 SC** labels for a list of additional weeds controlled by these products, as well as for **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

<b>GRANTRON 750 WDG</b> 165 g/ha (8.3 g / 10 l water)	<b>PLUS</b>		
	<b>Palladium Plus 915 EC / Pentium Plus 915 EC</b> 570 to 650 ml / ha* (28 to 33 ml / 10 l water)	<b>OR</b> <b>Platinum Plus 915 EC / Metolachlor 915 EC</b> 875 to 1000 ml / ha* (44 to 50 ml / 10 l water)	<b>OR</b> <b>Palladium Ultra 660 SC / Pentium Ultra 660 SC</b> 2400 ml / ha (120 ml / 10 l water)
<b>WEEDS CONTROLLED</b>			
<b>Botanical name</b>		<b>Common name</b>	
<i>Acanthospermum hispidum</i>		Upright starbur	
<i>Amaranthus hybridus</i>		Common pigweed	
<i>Brachiaria eruciformis</i>		Sweet signal grass	
<i>Chenopodium album</i>		White goosefoot	
<i>Chenopodium carinatum</i>		Green goosefoot	
<i>Cleome monophylla</i>		Spindlepod	
<i>Commelina benghalensis</i> **		Benghal wandering Jew	
<i>Digitaria sanguinalis</i>		Crab fingergrass	
<i>Datura ferox</i>		Large thorn apple	
<i>Echinochloa colona</i>		Marsh grass	
<i>Eleusine indica</i>		Goose grass	
<i>Eragrostis curvula</i>		Weeping love grass	
<i>Hibiscus cannabinus</i>		Kenaf	
<i>Hibiscus trionum</i>		Bladder weed	
<i>Nicandra physaloides</i>		Apple-of-Peru	
<i>Panicum schinzii</i>		Sweet buffalo grass	
<i>Physalis angulata</i>		Wild gooseberry	
<i>Polygonum aviculare</i>		Prostrate knotweed	
<i>Schkuhria pinnata</i>		Dwarf Marigold	
<i>Setaria pallide-fusca</i>		Red bristle grass	
<i>Tagetes minuta</i>		Tall Khaki weed	
<i>Triumfetta pilosa</i>		-	
<i>Xanthium strumarium</i> ***		Cocklebur	

\* Use the low rate on sandy soils and the higher rate on loamy / sandy clay soil.

\*\* Only at highest dosage rate.

\*\*\* Variable control of these weeds (up to 80 % suppression for a period of 8 weeks).



**2. Post-emergence application of GRANTRON 750 WDG plus Palladium 960 EC / Pentium 960 EC, Platinum 960 EC / Metolachlor 960 EC plus Terbusien Super 600 SC plus Villa 51 in maize for extended control of annual grass weeds:**

**NOTES**

- Apply this post-emergence application as a follow up to a pre-emergence application of **GRANTRON 750 WDG** in a tank mixture with **Palladium Plus 915 EC / Pentium Plus 915 EC, Platinum Plus 915 EC / Metolachlor 915 EC** or **Palladium Ultra 660 SC / Pentium Ultra 660 SC** as indicated on the registered labels.
- A Villa approved adjuvant such as **Villa 51** at 0.1 % must be used with all post-emergence applications of **GRANTRON 750 WDG** plus **Terbusien Super 600 SC**, as indicated on the registered label.
- Apply **GRANTRON 750 WDG** post-emergence in the 2- to 6-leaf stage for broadleaf weeds, and 2- to 3-leaf stage for grass weeds.
- Certain weeds may not be controlled effectively at the lower dosage rates.
- Refer to the **Palladium 960 EC / Pentium 960 EC, Metolachlor 960 EC** and/or **Pentium Ultra 660SC / Palladium Ultra 660 / SC** labels for a list of additional weeds controlled by these products, as well as for **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.
- Higher dosage rates of **Terbusien Super 600 SC** may be applied for control of additional broadleaf weed species and longer residual control of broadleaf weeds. Refer to the **Terbusien Super 600 SC** label for dosage rates, and a list of additional weeds controlled by this product, as well as for **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

<b>GRANTRON 750 WDG</b> 165 g/ha (8.3 g / 10 ℓ water)	<b>PLUS</b>			
	<b>Palladium 960 EC / Pentium 960 EC</b> 410 to 510 ml / ha * (21 to 26 ml / 10 ℓ water)	<b>OR</b> <b>Platinum 960 EC / Metolachlor 960 EC</b> 630 to 780 ml / ha * (32 to 39 ml / 10 ℓ water)	<b>Terbusien Super 600 SC</b> 800 ml / ha (40 ml / 10 ℓ water)	<b>Villa 51</b> (0.1 %) (10 ml / 10 ℓ water)
<b>WEEDS CONTROLLED</b>				
<b>Botanical name</b>		<b>Common name</b>		
<i>Acanthospermum hispidum</i>		Upright starbur		
<i>Amaranthus hybridus</i>		Common pigweed		
<i>Brachiaria eruciformis</i>		Sweet signal grass		
<i>Chenopodium album</i>		White goosefoot		
<i>Chenopodium carinatum</i>		Green goosefoot		
<i>Cleome monophylla</i>		Spindlepod		
<i>Commelina benghalensis</i> **		Benghal wandering Jew		
<i>Cyperus esculentus</i> ***		Yellow nutsedge		
<i>Digitaria sanguinalis</i>		Crab fingergrass		
<i>Datura ferox</i>		Large thorn apple		
<i>Echinochloa colona</i>		Marsh grass		
<i>Eleusine indica</i>		Goose grass		
<i>Eragrostis curvula</i>		Weeping love grass		
<i>Hibiscus cannabinus</i>		Kenaf		
<i>Hibiscus trionum</i>		Bladder weed		
<i>Nicandra physaloides</i>		Apple-of-Peru		
<i>Panicum schinzii</i>		Sweet buffalo grass		
<i>Physalis angulata</i>		Wild gooseberry		
<i>Polygonum aviculare</i>		Prostrate knotweed		
<i>Schkuhria pinnata</i>		Dwarf Marigold		
<i>Setaria pallide-fusca</i>		Red bristle grass		
<i>Setaria verticillata</i>		Sticky bristle grass		
<i>Tagetes minuta</i>		Tall Khaki weed		
<i>Triumfetta pilosa</i>		-		
<i>Xanthium strumarium</i> ***		Cocklebur		

\* Use the low rate on sandy soils and the higher rate on loamy / sandy clay soil.

\*\* Only at highest dosage rate.

\*\*\* Variable control of these weeds (up to 80 % suppression for a period of 8 weeks).

3. **Pre- and post-emergence application of GRANTRON 750 WDG plus Palladium 960 EC or Palladium Plus 915 EC plus Terbuweed Duo 900 WDG plus Villa 51 in maize for control of various weeds:**

- **GRANTRON 750 WDG** can be applied as part of a pre-emergence tank mixture application or as pre- and post-emergence tank mixture application.
- Apply **GRANTRON 750 WDG** post-emergence in the 2- to 6-leaf stage for broadleaf weeds, and 2- to 3-leaf stage for grass weeds.
- Certain weeds may not be controlled effectively at the lower dosage rates.
- Refer to the **Pentium 960 EC / Palladium 960 EC / Pentium Plus 915 EC / Palladium Plus 915 EC / Terbucide Plus 900 WDG / Terbuweed Duo 900 WDG** labels for a list of additional weeds controlled by these products.

<b><u>PRE-EMERGENCE</u></b>	<b>PLUS</b>			
	<b>GRANTRON 750 WDG</b> 165 g/ha	<b>Palladium Plus 915 EC / Pentium Plus 915 EC</b> 410 to 510ml / ha *	<b>Terbuweed Duo 900 WDG / Terbucide Plus 900 WDG</b> 540 g / ha	<b>None</b>
<b><u>POST-EMERGENCE</u></b>	<b>GRANTRON 750 WDG</b> 165 g/ha	<b>Palladium 960 EC / Pentium 960 EC</b> 570 to 650 ml / ha *	<b>Terbuweed Duo 900 WDG / Terbucide Plus 900 WDG</b> 540 g / ha	<b>Villa 51 (0.1 %)</b>
<b>WEEDS CONTROLLED</b>				
<b>Botanical name</b>		<b>Common name</b>		
<i>Acanthospermum hispidum</i>		Upright starburst		
<i>Amaranthus hybridus</i>		Common pigweed		
<i>Bidens pilosa</i>		Common blackjack		
<i>Commelina benghalensis</i>		Benghal wandering Jew		
<i>Crotalaria sphaerocarpa</i>		Mealie crotalaria		
<i>Cyperus esculentus**</i>		Yellow nutsedge		
<i>Datura ferox</i>		Large thorn apple		
<i>Datura stramonium**</i>		Common thorn apple		
<i>Digitaria sanguinalis</i>		Crab fingergrass		
<i>Eleusine indica</i>		Goose grass		
<i>Eleusine coracana</i>		Goose grass		
<i>Ipomoea purpurea**</i>		Common morning glory		
<i>Panicum schinzii</i>		Sweet buffalo grass		
<i>Setaria verticillata</i>		Sticky bristle grass		
<i>Tagetes minuta</i>		Tall Khaki weed		
<i>Tribulus terrestris</i>		Dubbeltjie / Devil's thorn		
<i>Xanthium strumarium</i>		Cocklebur		

\* Use the low rate on sandy soils and the higher rate on loamy / sandy clay soil.

\*\* Variable control of these weeds.

4. **Pre- and post-emergence application of GRANTRON 750 WDG plus Leap 840 EC or Acetochlor 900 EC plus Terbuweed Duo 900 WDG plus Villa 51 in maize for control of various weeds:**

- **GRANTRON 750 WDG** can be applied as part of a pre-emergence tank mixture application or as pre- and post-emergence tank mixture application.
- Apply **GRANTRON 750 WDG** post-emergence in the 2- to 6-leaf stage for broadleaf weeds, and 2- to 3-leaf stage for grass weeds.
- Certain weeds may not be controlled effectively at the lower dosage rates.
- Refer to the **Premium 840 EC / Leap 840 EC / Premium 900 EC / Acetochlor 900 EC / Terbucide Plus 900 WDG / Terbuweed Duo 900 WDG** labels for a list of additional weeds controlled by these products.

<b>PRE-EMERGENCE</b>	<b>PLUS</b>			
	<b>GRANTRON 750 WDG</b> 165 g/ha	<b>Leap 840 EC / Premium 840 EC</b> 950 to 1200 ml / ha *	<b>Terbuweed Duo 900 WDG / Terbucide Plus 900 WDG</b> 540 g / ha	<b>None</b>
<b>POST-EMERGENCE</b>	<b>GRANTRON 750 WDG</b> 165 g/ha	<b>Acetochlor 900 EC / Premium 900 EC</b> 630 to 780 ml / ha *	<b>Terbuweed Duo 900 WDG / Terbucide Plus 900 WDG</b> 540 g / ha	<b>Villa 51</b> 0.1 %
<b>WEEDS CONTROLLED</b>				
<b>Botanical name</b>		<b>Common name</b>		
<i>Acanthospermum hispidum</i>		Upright starburst		
<i>Amaranthus hybridus</i>		Common pigweed		
<i>Bidens pilosa</i>		Common blackjack		
<i>Commelina benghalensis</i> **		Benghal wandering Jew		
<i>Crotalaria sphaerocarpa</i>		Mealie crotalaria		
<i>Cyperus esculentus</i> **		Yellow nutsedge		
<i>Datura ferox</i>		Large thorn apple		
<i>Datura stramonium</i> **		Common thorn apple		
<i>Digitaria sanguinalis</i>		Crab fingergrass		
<i>Eleusine indica</i>		Goose grass		
<i>Eleusine coracana</i>		Goose grass		
<i>Ipomoea purpurea</i>		Common morning glory		
<i>Panicum schinzii</i>		Sweet buffalo grass		
<i>Setaria verticillata</i>		Sticky bristle grass		
<i>Tagetes minuta</i>		Tall Khaki weed		
<i>Tribulus terrestris</i>		Dubbeltjie / Devil's thorn		
<i>Xanthium strumarium</i>		Cocklebur		

\* Use the low rate on sandy soils and the higher rate on loamy / sandy clay soil.

\*\* Variable control of these weeds.

**5. Post-emergence application of GRANTRON 750 WDG plus Palladium 960 EC plus Terbuweed Duo 900 WDG plus Halo 750 WDG plus Villa 51 in maize for control of various weeds:**

**NOTES**

- Apply **GRANTRON 750 WDG** post-emergence in the 2- to 6-leaf stage for broadleaf weeds, and 2- to 3-leaf stage for grass weeds.
- Certain weeds may not be controlled effectively at the lower dosage rates.
- Refer to the **Pentium 960 EC / Palladium 960 EC / Terbucide Plus 900 WDG / Terbuweed Duo 900 WDG / Crown 750 WDG / Halo 750 WDG** labels for a list of additional weeds controlled by these products.

<b>GRANTRON 750 WDG</b> 165 g/ha	<b>PLUS</b>			
	<b>Palladium 960 EC / Pentium 960 EC</b> 410 to 510 ml / ha *	<b>Terbuweed Duo 900 WDG / Terbucide Plus 900 WDG</b> 540 g / ha	<b>Halo 750 WDG / Crown 750 WDG</b> 50 g / ha	<b>Villa 51</b> (0.1 %)
<b>WEEDS CONTROLLED</b>				
<b>Botanical name</b>		<b>Common name</b>		
<i>Acanthospermum hispidum</i>		Upright starburst		
<i>Amaranthus hybridus</i>		Common pigweed		
<i>Cyperus esculentus</i> **		Yellow nutsedge		
<i>Datura stramonium</i> **		Common thorn apple		
<i>Ipomoea purpurea</i>		Common morning glory		
<i>Schkuhria pinnata</i>		Dwarf Marigold		
<i>Tagetes minuta</i> **		Tall Khaki weed		
<i>Xanthium strumarium</i> **		Cocklebur		

\* Use the low rate on sandy soils and the higher rate on loamy / sandy clay soil.

\*\* Variable control of these weeds.

**6. Post-emergence application of GRANTRON 750 WDG plus Palladium 960 EC plus Terbuweed Duo 900 WDG plus Nicoron 750 WDG plus Villa 51 in maize for control of various weeds:**

**NOTES**

- Apply **GRANTRON 750 WDG** post-emergence in the 2- to 6-leaf stage for broadleaf weeds, and 2- to 3-leaf stage for grass weeds.
- Certain weeds may not be controlled effectively at the lower dosage rates.
- Refer to the **Pentium 960 EC / Palladium 960 EC / Terbucide Plus 900 WDG / Terbuweed Duo 900 WDG / Nicosulfuron 750 WDG / Nicoron 750 WDG** labels for a list of additional weeds controlled by these products.

<b>GRANTRON 750 WDG</b> 165 g/ha	<b>PLUS</b>			
	<b>Palladium 960 EC / Pentium 960 EC</b> 410 to 510 ml / ha *	<b>Terbuweed Duo 900 WDG / Terbucide Plus 900 WDG</b> 540 g / ha	<b>Nicoron 750 WDG / Nicosulfuron 750 WDG</b> 60 g / ha	<b>Villa 51</b> (0.1 %)
<b>WEEDS CONTROLLED</b>				
<b>Botanical name</b>		<b>Common name</b>		
<i>Amaranthus hybridus</i>		Common pigweed		
<i>Commelina benghalensis</i>		Benghal wandering Jew		
<i>Eleusine indica**</i>		Goose grass		
<i>Hibiscus trionum</i>		Bladder weed		
<i>Galinsoga parviflora</i>		Gallant soldier		
<i>Panicum schinzii</i>		Sweet buffalo grass		
<i>Portulaca oleracea</i>		Purslane		
<i>Rumex acetosella</i>		Sheep's sorrel		
<i>Sorghum bicolor</i>		Wild grain sorghum		
<i>Sorghum halepense</i>		Johnson grass		
<i>Tagetes minuta</i>		Tall Khaki weed		
<i>Triticum aestivum</i>		Volunteer wheat		
<i>Tribulus terrestris</i>		Dubbeltjie / Devil's thorn		
<i>Xanthium strumarium</i>		Cocklebur		

\* Use the low rate on sandy soils and the higher rate on loamy / sandy clay soil.

\*\* Variable control of these weeds.

Consult all products labels mentioned in this label for **WARNINGS, PRECAUTIONS, USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

The following products mentioned in this label may be replaced with equivalent products:

- **PALLADIUM PLUS 915 EC** (L 9359/ W 1301000) = **PENTIUM PLUS 915 EC** (L 9741) = (**S-metolachlor**),
- **PALLADIUM 960 EC** (L 9922 / W 130772) = **PENTIUM 960 EC** (L 9830) = **PARTISAN 960 EC** (L 9964) (**S-metolachlor**),
- **PALLADIUM ULTRA 660 SC** (L 9922) = **PENTIUM ULTRA 660 SC** (L 9924) = **PARTISAN ULTRA** (L 9973) (**Atrazine + S-metolachlor**),
- **PLATINUM PLUS 915 EC** (L 7844) = **METOLACHLOR 915 EC** (L 7841 / N-AR 1361) = **PLATINUM PLUS 915 EC** (L 8249),
- **PLATINUM 960 EC** (L 7434) = **METOLACHLOR 960 EC** (L 7136 / W 130057 / N-AR 1362) = **PLATINUM 960 EC** (L 8129) and
- **VILLA 51** (L 8050 / W 130454 / N-AR 1090) = **WEN 51** (L 8315).
- **HALO 750 WDG** (L 8283) = **CROWN 750 WDG** (L 8282) = **STRIGO 750 WDG** (L 8671) (**Halosulfuron**),
- **NICORON 750 WDG** (L 8045 / N-AR 1337) = **NICOSULFURON 750 WDG** (L 8059) = **ODIN 750 WDG** (L 8495) (**Nicosulfuron**),
- **TERBUWEED DUO 900 WDG** (L 9890) = **TERBUCIDE PLUS 900 WDG** (L 9888) (**Atrazine + terbuthylazine**),
- **LEAP 840 EC** (L 8064 / N-AR 1103) = **PREMIUM 840 EC** (L 8066) = **ARMANN SUPER 840 EC** (L 8373) (**Acetochlor**),

- **ACETOCHLOR 900 EC** (L 7633 / N-AR 1101) = **PREMIUM 900 EC** (L 7637) = **ARMANN 900 EC** (L 8626) and
- **LAMBDA 50 EC** (L 7787) = **JUDO 50 EC** (L 7785) = **LAMBDA-CYTHRIN 50 EC** (L 8343) (Lamda-cyhalothrin).

**PENTIUM PLUS 915 EC, METOLACHLOR 915 EC, PENTIUM 960 EC, CROWN 750 WDG, NICOSULFURON 750 WDG, TERBUCIDE PLUS 900 WDG, PREMIUM 840 EC, PREMIUM 900 EC, JUDO 50 EC, METOLACHLOR 960 EC, and/en PENTIUM ULTRA 660 SC** are registered products of/is geregistreeerde produkte van **UNIVERSAL CROP PROTECTION (PTY) LTD.**

**VILLA 51, WEN 51, PALLADIUM PLUS 915 EC, PLATINUM PLUS 915 EC, PLATINUM 960 EC HALO 750 WDG, NICORON 750 WDG, TERBUWEED DUO 900 WDG, LEAP 840 EC, ACETOCHLOR 900 EC, LAMBDA 50 EC, PALLADIUM 960 EC and/en PALLADIUM ULTRA 660 SC** are registered products of/is geregistreeerde produkte van **VILLA CROP PROTECTION (PTY) LTD.**

**PLATINUM PLUS 915 EC, PARTISAN 960 EC, PARTISAN PLUS 915 EC, LAMBDA-CYTHRIN 50 EC, PARTISAN ULTRA 660 SC and/en PLATINUM 960 EC** are registered products of/is geregistreeerde produkte van **CROPASURE (PTY) LTD.**

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