

# Mocap<sup>®</sup>

10 GR BIODAC



*Root knot damage*



*Wireworms*



*Chefer grubs*



*Banana weevil - secondary infection*

## INSECTICIDE/NEMATICIDE TO GET RID OF SOIL PESTS

The active ingredient of Mocap<sup>®</sup> - ethoprophos is an organophosphate compound with a wide spectrum of activity against nematodes and soil insect pests. Mocap<sup>®</sup> acts primarily by contact and has no fumigant action. Its activity usually lasts for 2-4 months, thus ensuring long-lasting crop protection

Mocap<sup>®</sup> gives excellent control of all nematode species and important soil insects in ornamentals, vegetables, bananas, pineapples, maize, potatoes, pyrethrum, sugarcane, tobacco and other crops. Rain, irrigation or adequate moisture is required to activate the granules.



### Spectrum of Activity

Mocap<sup>®</sup> is extremely active against all species of nematodes as long as they are in a free form since its action is only by contact. It provides good economic control of certain major soil pests and is particularly effective against the larvae of insects and myriapods (millipedes and centipedes) which attack underground plants or at the soil surface.

### Method of Application

Mocap<sup>®</sup> 10 GR Biodac can be applied at any time either before planting or at planting or to established crops. For nematicide treatments, the product should be applied to the soil surface by broadcast application and then incorporated into the soil immediately after application. Band treatments on both sides of the seed/plant rows to be carried out and this enables the rate of active ingredient used to be lowered. Insecticide treatments are best applied in bands on both sides of the planting rows and incorporated into the soil immediately after application.

### Behaviour in Soil

The half-life of ethoprophos in the soil varies considerably depending on soil pH, organic matter content, temperature and humidity. The average half-life of ethoprophos is 14-28 days in a neutral soil but it may increase to 3 months in acid soil. The half-life increases in the soil with high levels of organic matter but when temperature and humidity levels rise. The mobility of ethoprophos is low and limited to within a few centimetres and depends on the humidity and soil type.

### Residues

The active ingredient of Mocap<sup>®</sup>, ethoprophos is not systemic and therefore does not leave any detectable residues and no pre-harvest intervals are required. For root crops such as carrots, potatoes etc it is recommended that Mocap<sup>®</sup> be applied as a pre-planting treatment.

### Crop tolerance

Mocap<sup>®</sup> 10 GR Biodac is well tolerated by crops listed on the label when used as recommended. In general, it is better to apply Mocap<sup>®</sup> 10 GR Biodac first and incorporate it into the soil before seeding to avoid any risk of phytotoxicity.

#### Note:

As the different species and varieties of ornamentals and other crops may differ in their sensitivity to chemical, users are advised to always check for the crop compatibility by first carrying out preliminary crop safety test before large scale application is undertaken. Some crops are sensitive to Mocap<sup>®</sup> 10 GR Biodac and, in general, the product should not be applied directly onto the seed, but should be incorporated into the soil before seeding.

### Biodac




Mocap<sup>®</sup> 10 GR Biodac has been formulated using Biodac as its carrier material. Biodac is made from plant materials and is designed with environmental concerns and application safety in mind.

#### Advantages of Biodac




- Biodac is made from paper fibre and hence environmentally sound.
- Is practically dust-free and thus more safe to the user.
- Keeps your operating facilities clean (less particles in the air).
- Decreases the smell of the product.
- Size and homogeneous rounded particles.
- More particles per gram of product thus better performance.






## Directions for use:

| Crop  | Pest  | Application rate  | Application method/Remarks   |
|---|---|---|--|
|  <p data-bbox="207 831 310 857">Banana</p>          | <p data-bbox="495 286 643 313"><b>Nematodes</b></p><br><p data-bbox="495 450 721 510"><b>Weevils</b><br/>(<i>Cosmopolites spp.</i>)</p>   | <p data-bbox="771 286 1010 313">30 - 40 g per stool</p><br><p data-bbox="771 450 945 477">30 g per stool</p>  | <p data-bbox="1053 286 1490 398">Clear trashmat around the stool. Broadcast granules evenly to the soil over a radius of 70-80 cm around each stool prior to irrigation or rainfall.</p> <p data-bbox="1053 427 1490 562">Clear trash mat around the stool. Apply granules as close to the plant as possible over a radius of 30-40 cm around each stool prior to irrigation or rainfall.</p> <p data-bbox="1053 591 1490 674"><b>Note:</b> Repeat applications as necessary at 4-6 month intervals.</p> |
|  <p data-bbox="215 1451 297 1478">Maize</p>        | <p data-bbox="495 987 643 1014"><b>Nematodes</b></p><br><p data-bbox="495 1122 695 1227"><b>Wireworms</b><br/><b>Cutworms</b><br/><b>Noctuids larvae</b><br/><b>Myriapods</b></p> | <p data-bbox="771 987 883 1014">50 kg/ha</p><br><p data-bbox="771 1122 1003 1182">1 g per 1 m row length or 30 kg/ha</p><br><p data-bbox="771 1234 987 1261">1.0 g around hole</p>  | <p data-bbox="1053 987 1490 1070">Broadcast treatment before or at planting seed and incorporate into top soil by light cultivation.</p> <p data-bbox="1053 1122 1490 1182">Apply as a band 15 - 20 cm wide over the closed seed furrow (at planting).</p> <p data-bbox="1053 1234 1490 1294">Sprinkle the granules around the planting hole (at planting).</p> <p data-bbox="1053 1346 1490 1451"><b>Note:</b> Treatment directed into seed rows is not recommended (risk of phytotoxicity).</p>        |
|  <p data-bbox="167 2078 345 2105">Ornamentals</p> | <p data-bbox="495 1621 643 1648"><b>Nematodes</b></p><br><p data-bbox="495 1733 643 1816"><b>Wireworms</b><br/><b>Cutworms</b><br/><b>Myriapods</b></p>                           | <p data-bbox="771 1621 993 1682">80 - 100 kg/ha or 10 g/m<sup>2</sup></p><br><p data-bbox="771 1733 948 1794">1 g per 1 m row length</p><br><p data-bbox="771 1845 945 1872">30 - 40 kg/ha</p><br><p data-bbox="771 1924 883 1951">20 kg/ha</p> | <p data-bbox="1053 1621 1490 1682">Broadcast treatment, pre-plant or at planting.</p> <p data-bbox="1053 1733 1490 1794">Pre-planting or after planting. Band treatment, 15cm wide.</p> <p data-bbox="1053 1845 1300 1872">Broadcast treatment.</p> <p data-bbox="1053 1924 1243 1951">Band treatment.</p> <p data-bbox="1053 2002 1490 2063"><b>Note:</b> A preliminary crop safety test should be carried out.</p>   |

Directions for use:

| Crop  | Pest   | Application rate   | Application method/Remarks  |
|---|--|--|---|
|  <p>Pineapples</p>  | <p><b>Nematodes</b></p><br><br><br><br><br><p><b>Symphylids</b></p>  | <p>200 kg/ha or 20 g/m<sup>2</sup></p> <p>80 kg/ha</p> <p>80 kg/ha</p> | <p>Pre-plant broadcast treatment, followed by soil incorporation into top 7 - 10 cm soil.</p> <p>Application on established plants on both sides of the crop row.</p>         |
|  <p>Potatoes</p>   | <p><b>Nematodes</b></p><br><br><p><b>Wireworms</b><br/><b>White grubs</b><br/><b>Cutworms</b><br/><b>Myriapods</b></p>                 | <p>80 kg/ha</p> <p>50 kg/ha</p>  | <p>Pre-plant broadcast treatment, followed by a 7-15 cm soil incorporation.</p> <p>Pre-plant-broadcast treatment, followed by soil incorporation.</p>                         |
|  <p>Sugarcane</p> | <p><b>Nematodes</b><br/><b>Wireworms</b><br/><b>Noctuids</b><br/><b>White grubs</b></p><br><p><b>Caterpillar</b><br/><b>Borers</b></p> | <p>30 kg/ha</p><br><br><br><br><p>20 kg/ha</p>                         | <p>Apply in 40 cm bands on the crop row in-furrow treatment.</p> <p>Apply at planting towards the base of the plant without soil incorporation and repeat 6 months later.</p> |

## Directions for use:

| Crop  | Pest  | Application rate   | Application method/Remarks   |
|---|---|--|--|
|  <p data-bbox="186 678 305 707"><b>Tobacco</b></p>          | <p data-bbox="480 277 630 338"><b>Nematodes</b><br/><b>Soil insects</b></p> <p data-bbox="480 387 630 416"><b>Nematodes</b></p> <p data-bbox="480 472 708 663"><b>Cutworms</b><br/><b>Flea beetle larvae</b><br/><b>Wireworms</b><br/><b>Coleopteran larvae (where nematodes are not present)</b></p> | <p data-bbox="756 277 935 338"><b>Nursery beds:</b><br/>5 - 10 g/m<sup>2</sup></p> <p data-bbox="756 387 870 416">80 kg/ha</p> <p data-bbox="756 472 870 501">60 kg/ha</p> | <p data-bbox="1032 387 1471 501">Apply granules as a pre-plant or at planting broadcast soil incorporated treatment. Irrigate immediately after application or apply prior to rainfall.</p>  |
|  <p data-bbox="186 1238 321 1267"><b>Vegetables</b></p>    | <p data-bbox="480 904 630 934"><b>Nematodes</b></p> <p data-bbox="480 990 678 1151"><b>Noctuid Larvae</b><br/><b>Diptera</b><br/><b>Wireworms</b><br/><b>Cutworms</b><br/><b>Millipedes</b><br/><b>Centipedes</b></p>   | <p data-bbox="756 904 870 934">80 kg/ha</p> <p data-bbox="756 990 870 1019">50 kg/ha</p>   | <p data-bbox="1032 904 1471 987"><b>Nursery</b><br/>Broadcast and incorporate into top 10 - 15 cm soil before sowing.</p> <p data-bbox="1032 1016 1471 1131"><b>Planting holes</b><br/>Apply 2 grams per hole and incorporate Mocap® into the soil before planting the seedling.</p> |
|  <p data-bbox="186 1798 342 1827"><b>French Beans</b></p> | <p data-bbox="480 1456 630 1485"><b>Nematodes</b></p> <p data-bbox="480 1563 678 1702"><b>Beetle larvae</b><br/><b>Cutworms</b><br/><b>Diptera larvae</b><br/><b>Noctuid larvae</b><br/><b>Myriapods</b></p>  | <p data-bbox="756 1456 984 1485">80 kg/ha or 8 g/m<sup>2</sup></p> <p data-bbox="756 1563 984 1592">50 kg/ha or 5 g/m<sup>2</sup></p>                                      | <p data-bbox="1032 1547 1471 1630">Broadcast and incorporate in bands of 35-40 cm wide before planting.</p>  |

**NOTE:** Pesticide users are reminded to read and follow the instructions on the product label for details of pesticide use before application at all times.

Mocap® is a registered trademark of Bayer CropScience AG.

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