

INSECTICIDE



MET52[®] GRANULAR BIOINSECTICIDE

A granular product containing 2% w/w *Metarhizium anisopliae* var. *anisopliae* strain F52 (a minimum of 9×10^{11} cfu/kg).

For controlling black vine weevil (*Otiorhynchus* spp.) larvae in soft fruit and ornamental crops (protected and unprotected).

Product registration number: **MAPP 15168**
(PCS 04811)

Contains a specific strain of a natural insect pathogenic fungus.

For incorporation into soil or growing media for the control of vine weevil in open field and container crops.

Effective long lasting control.

fargro[®]

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**USE PLANT PROTECTION PRODUCTS SAFELY.
ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE**

MET52[®] GRANULAR BIOINSECTICIDE

- A novel biological insecticide for control of vine weevil in open field, substrate and container crops.
- Recommended for use on ornamentals and a wide range of soft fruit crops.
- When used as directed for vine weevil a range of other pests which complete part of their life cycle in growing media should be controlled or reduced.
- Extensively researched in Britain, Europe and North America.
- Trials have demonstrated long term control for up to 2 years.
- Viable over a wide temperature range.
- Resistance unlikely.
- No problems with chemical residues.

The following text is taken from the approved product label:

Restrictions and warnings

- Use all contents immediately.
- Do not freeze.
- Consult processor before using on crops grown for processing.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

MET52 GRANULAR is a microbial based pest control product containing the entomopathogenic fungi *Metarhizium anisopliae* var. *anisopliae* strain F52, a naturally occurring insect parasitic fungus that is not genetically modified. This product is intended for control of black vine weevil, *Otiorhynchus sulcatus* (larval stages only). Black vine weevil is a common and noxious polyphagous pest of soft fruit and ornamentals.

MET52 GRANULAR contains 2% active substance, intended for incorporation into crop growing media and soil in protected and unprotected situations. MET52 GRANULAR can be used at all crop growth stages from propagation to final potting.

When plants are potted on into larger containers the fresh growing media, into which

they are being potted, should also be treated to maintain good control. Larvae within the original root-ball may not be controlled by application at re-potting.

Pest control

Black vine weevil (BVW), *Otiorhynchus sulcatus* (Coleoptera: Curculionidae) are important and widespread pests of ornamental nursery stock and soft fruit. Adults damage the above ground parts of plants typically causing notching of leaves. Larvae feed on roots reducing number and quality of roots which in turn reduces plant vigour and health and can cause plant death, particularly in dry or hot environmental conditions.

Crop recommendations

MET52 GRANULAR is for use on all soft fruit and ornamental plants (covering flowers/foilage, woody ornamentals and bulb production as listed on label. MET 52 GRANULAR is effective against all larval stages of black vine weevil when applied shortly before egg-laying occurs.

Application rate & frequency

MET52 GRANULAR is to be incorporated into soil or growing media at a rate of 0.5 kg/m³. It is essential to incorporate thoroughly into the growing media and once incorporated, treated media should be used within 30 days. To obtain good control of black vine weevil larvae in small containers it is particularly important to ensure even mixing of

the correct dose into the substrate. When applying to field-grown crops, broadcast at a rate of 122 kg/ha in spring immediately prior to planting and thoroughly incorporate into the top 5 cm of soil. Do not apply to established crops or before planting crops in autumn.

Best conditions for MET52 GRANULAR bioinsecticide

MET52 GRANULAR works well when the temperature is between 15° and 30°C and conditions are not excessively wet. Outside this temperature range, activity may be reduced but spores remain viable, unless temperatures rise above 40°C when spore viability may decline rapidly.

Soil type

Control of larvae is likely to be greatest in peat-based growing media.

Qualified Minor Use: Limited data support effectiveness in soil and only reduction of larvae may be achieved, particularly in heavier soil types.

Mixing

Mixing equipment must be clean and free of pesticide residues. Thoroughly mix the

product into the growing media or soil.

Compatibility

MET52 GRANULAR should not be mixed with other pesticides. The effect of fungicides applied either before or after MET52 GRANULAR on the effectiveness of MET52 GRANULAR has not been established.

The effect of MET52 GRANULAR on insects and mites used in biological control programmes has not been established and safety cannot be assumed.

MET52 GRANULAR has been used on a wide range of crops under a range of conditions and no phytotoxicity has been observed.

Resistance

MET52 GRANULAR has not been reported to have any insect resistance however, it is good practice to use such products as components of Integrated Pest Management systems, alternating with other control measures. This is particularly important for sequential crops.

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL INSECTICIDE

Can be used on both protected and field crops. Professional use only.

Crop:	Ornamental plant production	Blueberry	Redcurrant
	Blackberry	Gooseberry	Strawberry
	Blackcurrant	Raspberry	Whitecurrant

Maximum individual dose: 0.5 kg/m³ of growing media/soil.
122 kg/ha for open ground usage.

Latest time of application: Pre-planting.

Other specific restrictions: Nil.

Control of larvae is likely to be greatest in peat-based growing media.

Qualified Minor Use: Limited data support effectiveness in soil and only a reduction of larvae may be achieved, particularly in heavier soil types. The commercial risk of using this product under this Qualified Minor use is borne entirely by the grower.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

MET52 GRANULAR BIOINSECTICIDE

Contains *Metarhizium anisopliae* var. *anisopliae* strain F52.

Micro-organisms may have the potential to provoke sensitising reactions.

Keep out of reach of children.

Keep away from food, drink and animal feeding stuffs.

Avoid contact with skin.

Wear suitable gloves.

If swallowed, seek medical advice immediately and show this container or label.

Use appropriate containment to avoid environmental contamination.

This material and its container must be disposed of in a safe way.

To avoid risk to man and the environment, comply with the instructions for use.

MAPP 15168 / PCS 04811

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work - UK only.

SAFETY PRECAUTIONS**Operator protection**

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND SUITABLE RESPIRATORY PROTECTIVE EQUIPMENT* when handling the product or applying the product.

*Disposable filtering facepiece respirator to at least EN149 FFP3 or equivalent.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection - UK only.

IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible).

WASH HANDS AND EXPOSED SKIN before meals and after work.

Environmental protection

DO NOT CONTAMINATE WATER WITH THE PRODUCT OR ITS CONTAINER (avoid contamination via drains from farmyards and roads).

Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

MET52 GRANULAR is a biological product and has a guaranteed shelf-life of 1 year at room temperature. The product should preferably be stored at 4 to 5°C to retain maximum viability.

DO NOT RE-USE CONTAINER FOR ANY OTHER PURPOSE.

WASH OUT CONTAINER THOROUGHLY, and dispose of safely.

CLEAN ALL EQUIPMENT after use.

See accompanying technical notes for further information.

Approval Holder:

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Emergency Phone for MET52 GRANULAR

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Pack Size: 1kg and 10 kg.

Marketed in UK by Fargro Ltd.

Safety data sheet available on request.

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