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## General Information

### General

Met52 Granular Bioinsecticide is composed of spores of the insect pathogenic fungus *Metarhizium anisopliae* Strain F52 on a grain matrix. Once the product is incorporated into the growing medium, insects that come into contact with the fungus will become infected. The spores of *Metarhizium anisopliae* attach to the surface of the insect, germinate, and begin to grow. It will penetrate the exoskeleton of the insect and grow inside the insect, causing the insect to die. Under moderate temperatures it usually takes three to seven days once the insect is exposed for death to occur. At very cold or hot temperatures death may occur more slowly. The fungal spores will be more persistent when incorporated in the soil, especially in potting media, than when applied to foliage.

Note: Met52 Granular Bioinsecticide contains live spores that may be harmed by storage at high temperatures. See storage and disposal section for more information.

Mode of action and application timing: Application frequency will depend on the environment to which Met52 Granular Bioinsecticide is applied and the target insects' life cycle. Persistence of Met52 Granular Bioinsecticide will generally be higher when incorporated into soil. Applications to leaf litter and turf may be done on a four to six week interval with an expected residual efficacy of a few months.

When possible, application to soil should be done in advance of when target insect will be passing through the top six inches of soil. A residual efficacy of a few months can be expected. Although the penetration of Met52 Granular Bioinsecticide into soil will vary greatly with soil type and level of irrigation it is best to target populations as close to the surface as possible or time application of Met52 Granular Bioinsecticide with a soil incorporation event.

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temperatures death may occur more slowly. The fungal spores will be more persistent when incorporated in the soil, especially in potting media, than when applied to foliage. Met52 Granular Bioinsecticide has been demonstrated to last through two black vine weevil egg laying seasons when incorporated into growing media in the spring before egg lay. Other insects that come into contact with infected insects may also be infected extending the control period.

#### Limitations, Restrictions, and Exceptions

#### Application:

Nursery planting mix: Apply Met52 Granular Bioinsecticide prior to or during planting by thoroughly mixing the product into the growing medium, ensuring even distribution. It may help distribution to first apply the full concentration of a smaller volume of growing medium such as to 1/10 to 1/3 of the total volume and then mix this concentrated growing medium with the full volume. Apply at a rate of 1.5 to 3.0 pounds of product per cubic yard of growing medium (or 25 to 50 grams per cubic foot of growing medium). Use higher label rates when larval pressure is expected to be high.

Met52 Granular Bioinsecticide is grown on rice grains that will decompose in the growing media. Pests likely to be attracted to grain, such as rodents, must be controlled prior to use of this product.

#### Method

#### [Soil application](#)

#### Rates

#### [field rates 0](#)

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#### Restricted Entry Interval

4 hours

#### Timings

#### [At-Plant](#)