



LIQUID



BIOINSECTICIDE

## BROAD SPECTRUM GREENHOUSE PEST MANAGEMENT

LALGUARD M52 OD (formerly Met52) is an effective and versatile **bioinsecticide for foliar and soil pest management**. Composed of spores of the fungus *Metarhizium brunneum* strain F52 (formerly *Metarhizium anisopliae*), this bioinsecticide provides proven pest control efficacy with minimum impact to applicators, non-targets, and the surrounding environment.

LALGUARD M52 OD offers growers **proven efficacy** against **the most destructive pests** infesting greenhouse, which include:

- ✓ Whiteflies
- ✓ Mites
- ✓ Thrips
- ✓ Aphids

Refer to the product label for the complete list of pests.

### ADVANTAGES

- **Broad spectrum** control
- No known risks for resistance
- **Compatible with IPM programs** using beneficial insects
- Tolerance exempt

### MODES OF ACTION

LALGUARD M52 OD causes the insect to die in 3 to 7 days after application. When in contact with the pest, spores of the active ingredient:

- Adhere to the insect's body
- Germinate and penetrate the insect cuticle (3 to 4 hours)
- Colonize and kill the insect

\*Only in US states where legally permitted. Contact your Lallemand representative for information.

### Greenhouse



### CHARACTERISTICS

**EPA Reg. No.:** 64137-33

**Active Ingredient:**  
*Metarhizium brunneum* strain F52

**Package Size**  
1.06 quart (1 liter)

**Storage information**  
12 month shelf-life in a dry and cool place ≤68°F (20°C). 18 months at 40°F (4°C).

**4-hour REI** drench, dip and foliar applications

**0-hour REI** soil incorporated

**0-day PHI**

**Always read and follow label instructions.**

### RECOMMENDED CROPS



Greenhouse  
Fruit & Vegetables



Greenhouse  
Cannabis\*



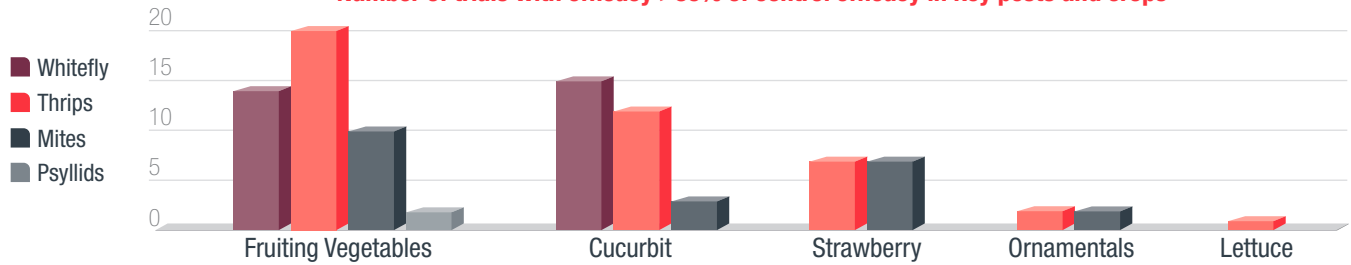
Greenhouse  
Ornamentals

### About Lallemand Plant Care

Since the beginning of the 20th Century, LALLEMAND has been an expert in yeast and bacteria manufacturing. The family-owned company is now a global leader in the development, production, and marketing of microorganisms for various agri-food industries. Using sound science and know-how, LALLEMAND PLANT CARE (LPC) works closely with clients to deliver the right technology, in the right formulation, for the right application. LPC is committed to solving grower challenges, significantly improving yield and crop vitality.



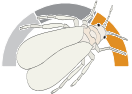
## TRIAL RESULTS

Number of trials with efficacy >50% of control efficacy in key pests and crops



## PRODUCT USE RECOMMENDATIONS

LALGUARD M52 OD can be applied preventively and as a rotational tool.

	CROP GROWTH STAGE	PEST OCCURANCE	HOW TO INCORPORATE	BENEFITS
PREVENTIVE	Early crop season	 First pest appearance	Start the crop season with LALGUARD M52 OD applications, 2 to 7 day intervals.	Delays increase of pest infestation.
	Advanced crop season	 Pest population outburst	Rotate LALGUARD M52 OD with conventional products to knockdown pest populations.	Reduces risk of resistance.
ROTATIONAL	Harvest time	 Pest management	Rotate LALGUARD M52 OD with conventional products.	Tolerance exemption reduces residues in harvested crops.

## APPLICATION RATES

CROP	PEST	APPLICATION	RATE
Cucurbits	Thrips <sup>1</sup> , Whiteflies, Mites	Drench	40–80 fl. oz. / 100 gal
		Foliar	8–64 fl. oz. (0.5 pt.–2 qt.) / acre
Celery, lettuce, spinach	Thrips <sup>1</sup> , Whiteflies, Mites, Aphids, Psyllids	Drench	40–80 fl. oz. / 100 gal
		Foliar	8–64 fl. oz. (0.5 pt.–2 qt.) / acre
Peppers, tomatoes	Thrips <sup>1</sup> , Whiteflies, Mites, Aphids, Psyllids	Drench	40–80 fl. oz. / 100 gal
		Foliar	8–64 fl. oz. (0.5 pt.–2 qt.) / acre
Strawberry, cranberry, raspberry, blackberry, blueberry For cranberry applications, do not apply to flooded fields.	Thrips <sup>1</sup> , Whiteflies, Mites, Aphids, Psyllids, Weevils <sup>2</sup>	Drench	40–80 fl. oz. / 100 gal
		Foliar	8–64 fl. oz. (0.5 pt.–2 qt.) / acre
Ornamental plants and grasses	Thrips <sup>1</sup> , Mites, Whiteflies, Weevils <sup>2</sup>	Drench	40–80 fl. oz. / 100 gal
		Foliar	8–32 fl. oz. (0.5 pt.–1 qt.) / 100 gal, spray to wet but avoid runoff

<sup>1</sup> Drench application only for Thrips pupae. <sup>2</sup> Drench application only for Weevil larvae.