

# Introducing A Powerful New BioInsecticide

# Thrips

Aphids

Mealybugs

Psyllids

# Whiteflies



| ACTIVE INGRED    | IENT:   |                      |
|------------------|---|----------------------|
| Paecilomyces fu  |   |                      |
| Inert Ingredient |   |                      |
| Total            |   |                      |
|                  | ht estimate of 4.0 x 10 <sup>12</sup> grams per blastospore<br>2x10° colony forming units of <i>Paecilomyces fumosore</i> | oseus strain FE 9901 |
|                  | KEEP OUT OF REACH OF CHILDREN   |                      |
|                  | CAUTION   |                      |
| See back         | panel for additional precautionary s  | tatements            |
|                  | FIRST AID   |                      |
| If inhaled:      | Move person to fresh air. If person is not breathing, call 911 or an ambulance, the                                       | n give artificial    |

|   | respiration preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.   |
|---|---|
| clothing:                                   | Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice. |
| Have the product co<br>or going for treatme | ontainer or label with you when calling a poison control center or doctor,  |

EPA Reg. No.: 88664-1 EPA Est No.: 88664-ESP-001 Lot# Best If Used By:

Net Content: 2-lbs (912-grams)

Mites

Weevils



## How it Works

What is NoFly?

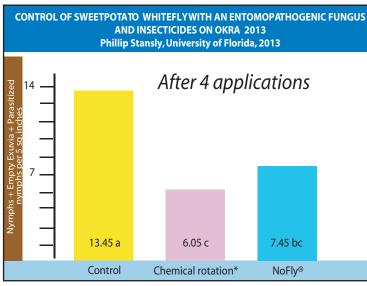
NoFly WP is a high concentration of the active ingredient *lsaria fumosoroseus* strain FE 9901, a naturally occurring insecticidal microorganism. This aggressive fungus is a natural predator to select insect pests while non-pathogenic to beneficials. NoFly WP is also compatible with many chemicals making it an excellent tool for use in an Integrated Pest Management program. NoFly WP is effective against whiteflies, aphids, thrips, mealybugs and other insect pests..

Host Range: Whiteflies, Aphids, Thrips, Mites, Mealybugs & other insect pests

When spores of NoFly WP come into contact with the insect pest they attach to the body and begin to grow almost immediately. Once the spore germ tube penetrates the host cuticle, fungal multiplication takes place through formation of hyphal bodies in the host hemocoel. The NoFly WP microbe mechanically disrupts the host's internal organs and initiates tissue necrosis. This leads to lack of feeding, inactivity and eventually death.

The end result? Insect pests sprayed with NoFly WP stop feeding in about 24 hours and are killed in about 5 days.

| CROP  | PEST  | RATE               | APPLICATION DIRECTIONS  |
|---|---|--------------------|---|
| All fruits & veggetables,<br>tree fruit & nuts,<br>potatoes, row crops,<br>herbs, spices and other<br>outdoor agriculture pro-<br>duction crops | Eggs, larvae and adults of<br>whiteflies, thrips, aphids,<br>mealybugs, mites, spider mites,<br>russett mites, bagrada bug, leaf<br>hopper, plant bug, weevils,<br>psyllids, fungus gnats<br>and other insect pests | 8 - 32 oz per acre | Apply at first symptoms of pest attack.<br>Minimum 3 applications at 5-7 day intervals<br>or shorter in severe infestations |



\*Venom®, Daitol®, Knack®, Malathion®, Hero® and Courier® mix and rotation





Above Picture: Western Flower Thrip infected and killed by NoFly WP





Call 832.647.9663 for more information.

## Directions For Use

NoFlyWP consists of spores of an entomopathogenic fungus that are susceptible to high temperatures, dryness and ultraviolet radiation. Avoid these potential adverse effects by applying the product in late afternoon, in the early morning and at mid to high relative humidity (if practical, pre-watering of crop is strongly suggested). Use sufficient water to ensure thorough coverage of the foliage including the underside of leaves.

## Features & Benefits

- Biological pesticide
- Attacks pests at all life stages from egg to adult
- Minimal residue issues
- · Ideal for integrated pest management
- Safe for beneficial insects
- · 6-month shelf life when refrigerated

NoFly WP Fogger Application

- NoFly can be used with a cold fogger (e.g. Dramm AutoFogger)
- · Do not use with heat-generating foggers
- Maximum dilution of 10-oz/gal of water

## Safe and Effective

*Isaria fumosoroseus* FE 9901 is not a plant pathogenic organism and does not produce significant detrimental effects on beneficial insects, including bees and bumblebees. The only residues derived from applications of NoFly WP are short lived spores that should not present any environmental persistence concerns in soil, water, or air. These characteristics make this product an idea tool for Integrated Pest Management Programs.







Technical Information

Organism (Active Ingredient): Isaria fumosoroseus strain FE 9901

#### **General Description:**

Naturally-occurring fungus, geographically widespread, and common pathogen of insect pests

#### Pests Suppressed/Controlled:

Whiteflies, aphids, thrips, psyllids, mealybugs, leaf hoppers, plant bugs, weevils, grasshoppers, Mormon crickets, locust, beetles (including darkling and hide beetles), mites (including russet, spider mites and chicken mites) bagrada bugs, lygus bugs and fungus gnats

#### Origin:

Isolated from the carcass of a whitefly

#### **Temperature Tolerance:**

Optimal temperature for sporelation of *Isaria* spores is between 72-84° F (22-28° C).

#### Humidity:

Optimal humidity of *l. fumosoroseus* FE 9901 is 50% or greater. If humidity is below 50%, spray product immediately after general watering or irrigation.

#### PH Tolerance:

NoFly WP is unaffected by pH ranges from 4.0 - 9.0

#### Shelf Life:

NoFly WP will remain viable at room temperature for up to 6 months. Refrigeration will extend the shelf life to 12 months. Storage recommendation at temperatures between 34<sup>o</sup> - 72<sup>o</sup> F.

#### **Chemical Compatibility:**

NoFly WP is compactible with some synthetic and natural insecticides and fungicides. See backside of this brochure for current list.

#### Avoid tank mixing with chemical fungicides.

#### **UV Sensitivity:**

The spores of NoFly WP are UV sensitive. Product should be sprayed in the early morning hours or evening to prevent degradation.





## www.blacksmithbio.com



# NoFly WP Product Compatibility

| Active Substance                    | Brand<br>Names             | Spore<br>Survivability | Compatible |
|-------------------------------------|----------------------------|------------------------|------------|
| Copper oxychloride 50%              |                            | 55.57%                 | NO         |
| Fenarimol 12%                       |                            | 73.31%                 | NO         |
| lprodione 50%<br>+ Cyproconazole10% |                            | 79.19%                 | NO         |
| Piperalin                           | Pipron                     |                        | NO         |
| Azoxystrobin                        | Heritage                   |                        | NO         |
| Pyrimethanil 40%                    |                            | 85.84%                 | Partially  |
| Streptomycin                        |                            |                        | YES        |
| Beauveria bassiana 2.3%             | Botanigard,<br>Naturalis O | 100%                   | YES        |
| Natural pyrethrins 4%               |                            | 100%                   | YES        |
| Pirimicarb 50%                      |                            | 95.75%                 | YES        |
| Acrinathrin 7.5                     |                            | 88.80%                 | YES        |
| Imidacloprid 20-24%                 |                            | 94.34%                 | YES        |
| Propamocarb 60.5%                   |                            | 100%                   | YES        |
| Bacillus blend + Streptomyces       | Armory                     | 100%                   | YES        |
| Bacillus sp.                        | DoubleNickel<br>Serenade   | , 100%                 | YES        |

## **NoFly Predator Insect Compatibility**

| Predator Name            | Harmful to Predator |  |  |
|--------------------------|---------------------|--|--|
| Encarsia formosa         | NO                  |  |  |
| Eretmocerus mundus       | NO                  |  |  |
| Macrolophus caliginosus  | NO                  |  |  |
| Orius laevigatus (N1)    | NO                  |  |  |
| Apis mellifera (contact) | NO                  |  |  |
| Apis mellifera (oral)    | NO                  |  |  |
| Amblyseius swirskii      | NO                  |  |  |
| Bombus terrestris        | NO                  |  |  |

Blacksmith BioScience 504 Spring Hill Dr. #440 Spring Texas 77386 www.blacksmithbio.com 832.647.9663

#### **DISTRIBUTED BY:**