

Purely Green Bio-Pesticide

Super Concentrate and Ready to Spray

Purely Green Biopesticide Super Concentrate and Ready to Spray are broad-spectrum contact and systemic bactericide, fungicide, and insecticide. The products are exempt from EPA (FIFRA 25b) as a minimum risk pesticide. Refer to Table 2 for the States permitting sale and use. They replace hazardous synthetic chemicals. Purely Green can be used on all crops, turf, ornamentals, pets, livestock and in and around structures. Pest control is essential to protect food supplies, people, animals, and property. However, synthetic pesticides are hazardous for shipping, storage, and application. Once used, their residuals are a risk to people, animals, beneficial insects, and the environment. Purely Green Bio-Pesticide meets the essential need for control without risk from handling, residuals, and pollution. Processed plant and oil seed extracts known to be beneficial for millennium are combined into colloidal micelles using a modern proprietary process blending them at specific time intervals, temperatures and sequences resulting in our breakthrough product system. Purely Green Bio-Pesticide is not a poison. It dissolves harmful insect protective coating (“chitin”). Wings and legs cannot move. The insect has no defense. No immunity is possible. Purely Green Bio-Pesticide complies with EPA regulatory requirements because it is exempt from registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as a minimum risk pesticide. Table 2 lists the States where it is approved for sale and use.

Cost - Value

General: The 1-gallon price for Super Concentrate is \$45.00. It is diluted for use at 3-ounces or \$1.05 per gallon. Each application will cost <\$2.00 per acre. Costs will be lower per acre depending upon product concentration and quantity purchased. Growers report synthetic pesticide costs from \$50 to \$70 per acre. (Source: <https://farmdocdaily.illinois.edu/>)

Application

Farm and Garden Pests: Spray top and bottom of leaves, limbs and stem until all targets are wet. Drench the soil and roots well enough to reach all targets. Repeat promptly before newly hatched eggs can reach reproductive stage. Drench roots monthly for uptake into sap and leaves for insect ingestion.

Trees (Fruit, Nut & Berry): Spray leaves, limbs, and trunks. Soak roots until drenched. Apply as a plant spray and soil drench whenever insects or pests are present.

Livestock and Pets: Mist stalls or spray livestock generously. Spray or shampoo pets. Product can be left to dry on animals or rinsed with clean water.

Flying & Crawling Insects: Mist or spray generously on flies, mosquitos, no-seeums, roaches, wasps, etc. Spray wasp nests. Soak ant beds, reaching the queen.

Post-Harvest Preservation: Wash produce and cut flowers with a Purely Green solution to extend freshness, marketability and/or edibility up to 5 days. Spray or dip produce in solution to remove residual chemicals or surface dirt. Rinse thoroughly before consumption.

Ingredients and Handling

Table 1 -Active Ingredients

Soybean Oil	1.63%
Cinnamon Oil	0.57%
Lemongrass Oil	0.57%
Garlic Oil	0.93%
Peppermint Oil	0.007%
Water and Soap	96.29%
Total	100%

All-natural processed extracts of natural plants and soap (Table 1)

Purely Green Bio-Pesticide is non-hazardous and biodegradable. Neither personal protective equipment and or special disposal are required. Water wash away overspray. Store in a dry place away from temperature extremes. Shelf life is 3-years.

Table 2:

States OK

States OK	Super Concentrate	Ready to Spray	States Not OK
AR	X		SD - NM - MS - ME - MD - CT - LA - IN - IL - AL - AK
AZ	X		
CA	X	X	
CO	X		
DE	X		
FL	X	X	
GA	X	X	
HI	X	X	
IA	X		
ID	X		
KS	X		
KY	X		
MA	X		
MI	X		
MN	X	X	
MO	X	X	
MT	X		
NC	X		
ND	X		
NE	X		
NH	X		
NJ	X	X	
NV	X		
NY	X	X	
OH	X		
OK	X		
OR	X		
PA	X		
RI	X		
SC	X		
TN	X		
TX	X	X	
UT	X		
VA	X		
VT	X		
WA	X		
WI	X		
WV	X		
WY	X		

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www.GreenSafeWorldwide.com

PURELY GREEN BIO-PESTICIDE FIELD TEST PROOF OF PERFORMANCE

Test Design: Bio-Pesticide Super Concentrate was tested against *Meloidogyne incognita* juvenile mortality and egg hatching. Treatments was by soil drench at the following water dilutions: 1, 2, 3, 4 and 5%. Each test was replicated five times.

Results Summary: All nematodes were found dead at 4% concentration 24 hours after treatment. At 3%, 95% were dead after 24-hours and complete mortality took place after 48-hours. At 2% concentration, 62% were dead after 24-hours and 100% after 48-hours. The 1% concentration

Table 1 - Bio-Pesticide Concentrations in Water Drench

Time Period	4%		3%		2%		1%		Control - Water Alone	
	Dead	Live	Dead	Live	Dead	Live	Dead	Live		
24-Hr.	100%	0%	96%	4%	62%	38%	10%	90%	0%	100%
48-Hr.	100%	0%	100%	0%	100%	0%	90%	10%	0%	100%

Figure 2 - Nematodes

(*Meloidogyne incognita* (root-knot nematode), also known as the "southern root-nematode" or "cotton root-knot nematode" is a plant-parasitic roundworm in the family Heteroderidae. This nematode is one of the four commonest species worldwide and has numerous hosts. It typically incites large, usually irregular galls on roots as a result of parasitism. Row crops like soybean, maize, tobacco, and cotton. *Meloidogyne incognita* is probably the most economically important plant-parasitic nematode species among the tropical and subtropical regions. This nematode is extremely polyphagous, attacking both monocotyledons and dicotyledons. It is estimated that more than 3,000 plant species can be affected.

Symptoms: Plants affected by *M. incognita* presents above ground symptoms of water and nutrient stress, yellowing, wilting, and stunting. Below ground galling on roots, bulbs, tubers are the typical symptom. Plant death may occur in high infestation level.

Morphology: Females of *M. incognita* are pear-shaped with no posterior protuberance. Their stylet ranges from 15-16 μm long, and knobs are rounded and offset. Perineal pattern is oval to rounded, typically with high dorsal arch, striae usually wavy, and lateral field absent or weakly demarcated. Males have a not offset head with an elevated labial disc without lateral lips (usually). Their stylet ranges from 23-26 μm long, and knobs are rounded to oval and offset. Juveniles second stage body size range from 350-450 μm long. Their tail has rounded tip and range from 43-65 μm in length with 6-14 μm long hyaline region.

Life cycle: Within the egg, the first molt occurs and a juvenile first state (J1) becomes a juvenile second stage (J2). Under favorable conditions (temperature, moisture, host stimulus) the J2 hatches, reaches and penetrates the host root. Root tips are the primary infection court. Once inside the roots, J2 migrate through cortical tissues towards the vascular zone where they establish a permanent feeding site called giant cell. At this point the nematode enlarges acquire a "sausage" shape and becomes sedentary. Three more molts occur, J2 becomes J3, J4 and then adult. *M. incognita* is sexually dimorphic. Females acquire a globose shaped body while males become vermiform and leave the roots. Upon maturity females lay eggs into a gelatinous mass that protect them against unfavorable environmental conditions, and the life cycle is repeated. It takes 37 days at 21 degree Celsius for *M. incognita* to complete its life cycle.

Management: Management of *M. incognita* depends primarily on the crop being affected and relies on multiple strategies such as cultural, biological, and chemical control. Among the cultural control crop rotation with nonhost or resistant varieties can be used to keep the nematode population at tolerable levels. Also, usage of organic amendments and antagonistic crops such as *Crotalaria spectabilis* (Leguminosae) and several *Tagetes* species (Asteraceae) is effective against this nematode. Some fungus that parasites eggs, for example *Paecilomyces lilacinus*, have been using as a biological control.

<https://www.agrogreencropscience.in/products.html>

Mosquito Control

Iowa Vegetables Grower: "We always wore special clothing when we harvested because the mosquitoes are unbelievable, they will even bite your eyes. We've had NO mosquitoes in the past two years thanks to your product."

Biological Natural Ingredients Model



SECTION 1 – PRODUCT NAME

Purely Green Bio-Pesticide

Ready to Use / Super Concentrate (Spray 3-oz/gal. water dilution.)

SECTION 2 – HAZARD IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture.

GHS Label elements

Signal Word: **None**

Pictogram - **None**

Synthetic Chemicals Model



SECTION 1 – PRODUCT NAME

Bifenthrin

SECTION 2 – HAZARD IDENTIFICATION

Classification of the substance or mixture

Acute Toxicity: Oral, Fatal if swallowed.

Acute Toxicity: Inhalation, Toxic if inhaled.

Skin Sensitization may cause allergic skin reaction.

Carcinogenicity, suspected of causing cancer.

Specific Target Organ Toxicity (repeated

exposure) Causes damage to organs.

Aquatic Toxicity (Acute), Very toxic to aquatic life.

Aquatic Toxicity (Chronic), Very toxic to aquatic life with long lasting effects.

GHS Label elements

Signal Word: **DANGER**

Pictograms: Skull and Crossbones - Health Hazard - Exclamation Mark - Environment



REGULATION - WPS (Chemical pest control requires the costs of time, materials, and risk management to comply with the EPA/State Ag Dept. enforced Worker Protection Standard - Training - Personal Protective Equipment - Storage - Compliance Record Keeping



Florida Department of Agriculture and Consumer Services Bureau of Pesticides, Pesticide Registration Section

BS

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JUNE 21, 2021

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THIS IS CONFIRMATION THAT THE FOLLOWING 1 PRODUCT BRAND(S) HAVE BEEN REGISTERED BY FLORIDA.

NOTE: ALL PERMITS AND REGISTRATIONS EXPIRE ON DECEMBER 31ST OF THE EVEN REGISTRATION YEAR AND MUST BE RENEWED FOR THE NEXT REGISTRATION PERIOD BY PAYMENT OF THE APPLICABLE FEES AS REQUIRED UNDER CHAPTER 487, FLORIDA STATUTES.

FIFRA SECTION 18 EMERGENCY EXEMPTION PETITIONS ARE NOT SUBJECT TO STATE REGISTRATION FEES, BUT ARE LISTED WITH OTHER PRODUCT BRANDS IN THE SYSTEM FOR AUDITING PURPOSES.

PRODUCT BRAND NAME	FL/EPA REG NO	EFFECTIVE DATE	EXPIRATION DATE
PURELY GREEN MOSQUITO CONTROL SUPER CONCENTRATE	EXEMPT	06/21/2021	12/31/2022