BioLogic
Biocontrol Products and Research

50 Million ECOMASK Spray Directions

Beneficial nematodes (*Steinernema carpocapsae*), the active ingredient in ECOMASK are native, naturally occurring insect parasitic nematodes that seek out pest insects, enter their body and release symbiotic bacteria which kill the pests. These nematodes have not been modified in any way and are supplied in a moist inert carrier. This product is only active against pest insects.

Refrigerate until use. Use before date marked on packaging. **DO NOT FREEZE.**

Contains a minimum of 50 million infective juvenile nematodes. Treats between 1600 and 4250 sq. ft. depending on pest and level of infestation.

Pump sprayers or watering can

1) Create nematode solution: mix contents of enclosed bag into 2 gallons clean cold water.

2) Determine application type from the reverse side. Thoroughly mix the nematode solution and add to the sprayer or can as indicated below for each gallon of sprayer capacity *(e.g. 2 gallon sprayer with application A would receive 4 cups of nematode solution).*

Application	Nematode Solution
A	2 cups
B	1 ¼ cups
C	¾ cup
D	1 ½ cups

3) Fill sprayer to capacity with cold water. Each gallon in the sprayer will treat 100 sq. ft.

4) Apply in late afternoon or evening, water application area, apply nematodes with a coarse spray while agitating solution, and water again to wash nematodes off foliage.

5) Repeat steps 2 through 4 until remaining nematode solution is used. Use all of the nematode solution within 24 hours of mixing.

BioLogic's Nema-Jet or hose end sprayer

1) Be sure to use either BioLogic's precalibrated **Nema-Jet Sprayer** or an equivalent hose end sprayer with a minimum of 1:100 dilution rate *(i.e. >0.75 ounce/gallon).*

2) Mix contents of enclosed bag in 5 cups of water.

3) Thoroughly mix and add 1 cup of mixture to the sprayer reservoir. Determine your application type from the reverse side. Each cup of solution should treat the area indicated below.

Application	Coverage Area (sq. ft.)
A	320
B	510
C	850
D	425

4) Apply in late afternoon or evening. Water application area, apply nematodes while agitating solution, and water again to wash nematodes off foliage.

5) Repeat steps 3 and 4 until remaining nematode solution is used. Use all of the nematode solution within 24 hours of mixing.

Insect borer directions

1) Mix contents of enclosed bag into 2 gallons clean cold water.

2) Inject 6 mls or about 1 tsp. of solution into each bore hole.

3) Cover bore hole with grafters wax or putty.

Safety

Beneficial nematodes are found throughout North American and European soils, but concentrations are too low to be effective. Horticultural practices such as cultivation and soil steaming kill beneficial nematodes. Therefore, soils need to be augmented with Ecomask. Ecomask is completely harmless to people, pets, and plants, by ingestion or injection. There is no phytotoxicity. The US Environmental Protection Agency (EPA) has exempted Ecomask from the registration required for chemicals (Federal Register vol. 47, #106, 23928). Recycle container after use, do not reuse. Not for human consumption. Store away from children. May cause allergic reaction. No warranty expressed or implied of any other purpose than stated here.

Helpful hints for common pests

Armyworms: Apply to moist turf. After application, keep area moist to allow ECOMASK to stay active at the surface until armyworms are killed.

Billbugs: Treat affected areas as early in the year as possible.

Codling moth larvae: Treat in early spring or early fall. Moist burlap can be wrapped around trunk of tree and sprayed to control larvae moving from the tree to the soil.

Cutworms: Apply in early spring before planting. After application, keep area moist to allow ECOMASK to stay active at the surface until cutworms are killed.

Flea larvae: Use application **D** for heavy and **C** for light infestations. Concentrate application on shaded areas of the lawn, around shrubs, under porches, and around structures.

Iris borers: Treat around rhizomes and spray into bore holes in late spring. Remove garden litter from beds in the fall and burn.

Shore flies: Treat entire greenhouse and any moist areas under trays.

Sod webworms: Apply to moist turf. After application, keep area moist to allow ECOMASK to stay active at the surface until sod webworms are killed.

BioLogic Company has been producing beneficial nematodes since 1985. We strive to deliver our customers with quality products grown and produced in the USA. We are proud to be a true American start-up and have grown by delivering quality, organic products. We do not exaggerate effective application rates. Our advertised application rates are based on either our research or research conducted by reputable institutes.

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Pest Insect	Application	Treatment Area	Treatment Time
General or Preventative Application	A	Treat affected areas	Anytime soil is not frozen
Annual Bluegrass Weevils	A	Treat around affected turf grass	March-September
Armyworms	A	Treat around crops	May-September
Artichoke Plum Moths	A	Treat around drip zone of crops	April-September
Banana Moths	A	Spray around plants and into visible bore holes	Anytime larvae are active
Banana Root Borers	A	Spray around corm and into visible bore holes	Anytime larvae are active
Billbugs	A	Treat affected areas	May-August
Black Vine Weevils	A	Treat around drip zone of affected plants	May or August-September
Carpenterworms	**Use borer directions**	Inject into bore holes	Anytime borers are active
Chinch Bugs	A	Treat damaged turf	Anytime soil is not frozen
Clearwing Borers	**Use borer directions**	Inject into bore holes	Anytime borers are active
Codling Moths	A	Spray around trunk and drip zone of trees	March-September
Corn Earworms	A	Spray or inject into corn silks	June-August
Corn Rootworms	A	Treat around crops	May-September
Cranberry Girdlers	A	Treat affected areas	May-August
Crane Flies	A	Treat moist areas of lawn	March-June or Aug.-Sept.
Cucumber Beetles	A	Treat around crops	March-July
Cutworms	B	Treat area before planting	March-July
Dogwood Borers	A	Treat around drip zone	March-July
Flea Larvae (heavy)	D	Treat shaded areas and around structures	Anytime soil is not frozen
Flea Larvae (light)	C	Treat shaded areas and around structures	Anytime soil is not frozen
Giant Palmetto Weevils	A	Treat around the base of palms	Anytime larvae are active
Iris Borers	A	Treat around rhizomes	April-July
Mint Flea Beetles	A	Treat affected areas	April-May
Mint Root Borers	A	Treat affected areas	April-May
Mole Crickets	A	Treat affected areas	Anytime soil is not frozen
Navel Orange Worms	A	Treat around drip zone of affect trees	April-May or August-Oct.
Peach Tree Borers	A	Treat around trunk and drip zone	March-August
Pine Weevils	A	Treat around trunk and drip zone	April-July
Poplar Clearwing Borers	**Use borer directions**	Inject into bore holes	Anytime borers are active
Raspberry Crown Borers	A	Spray ends of canes	March-September
Root Weevils	A	Treat around drip zone of affected plants	May or August-September
Rotten Sugarcane Borers	A	Treat around the base of plants	Anytime larvae are active
Shore Flies	A	Treat soil of potted plants	Anytime soil is not frozen
Sod Webworms	A	Treat affected areas of turf	Anytime larvae are active
Strawberry Root Weevils	A	Treat around affected plants	April-May or Aug.-Sept.