



Organic Crop Protectants



**KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS
BEFORE OPENING OR USING**

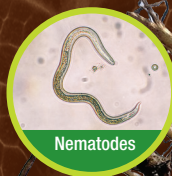
eco-nemguard™

ORGANIC* NEMATICIDE

**ACTIVE CONSTITUENT: 1280 g/L GARLIC EXTRACT
CONTAINING A MINIMUM 26 g/L TOTAL POLYSULFIDES.**

**For the suppression of nematodes (living freely in the soil)
and nematode damage to all vegetables and amenity turf**

* Registered for use in organic farming systems



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ORGANIC CROP PROTECTANTS
1956 Dandenong Rd, Clayton VIC 3168
Telephone: 1800 634 204 (Free Call)
ocp.com.au



LIFT HERE
FOR FURTHER
PRODUCT INFORMATION

GENERAL INSTRUCTIONS

Eco-nemguard™ acts as a contact nematocide on nematodes living freely in the soil, but the product is sensitive to periods of heavy or prolonged rainfall and drought and may therefore produce variable results due to these factors. A single application of eco-nemguard™ at the recommended rate and in appropriate conditions may reduce the level of root malformations detected in the fully mature crop. The benefits of using eco-nemguard™ can be variable and useful reductions of nematode damage or increases in marketable yield cannot be relied on. Field trials under optimum conditions have shown that at best a single application of eco-nemguard™ liquid drench will reduce nematode damage by 50-60% and aid plant establishment and uniformity.

THE BIOLOGY OF NEMATODES PARASITIC TO TURF: All parasitic nematodes feed by insertion of a needle like tube into root tissue. Eco-parasitic nematodes feed with the body outside the plant and in soil samples will be present at all stages in the life cycle i.e. mature adults, immature adults, juveniles, immature juveniles and eggs. Eco-parasitic nematodes are therefore generally vulnerable to a contact nematocide and high levels of population reduction of these nematodes can be achieved by 1-3 sequential treatments with eco-nemguard™. Endo-parasitic nematodes feed by progressive invasion of the plant tissue becoming embedded well into root cortex or specialised feeding sites formed by the nematode in the root mass. The invasive stage of the life cycle in endo-parasitic nematodes is a second instar juvenile (J2) recently emerged from an egg. Time from emergence from the egg to invasion of the root is usually a matter of a few days (up to 2 weeks) for most endo-parasitic nematodes. Once attached to the root, endo-parasitic nematodes are difficult to detect by normal extraction and filtration techniques.

Turf: Although a reduction of nematode numbers may be achieved, this may not be sufficient to reduce populations to below the levels which cause damage to the turf. Where nematode populations remain above damaging levels, an improvement in turf quality may not be seen. Note that an improvement in turf quality may not be seen even where nematode populations are reduced to below damaging levels (it is essential that appropriate fertiliser and fungicide inputs are made).

ENDOPARASITIC DAMAGE TO TURF: Symptoms of nematode damage in turf can be easily confused with other causative agents such as fungal disease, compaction, poor drainage, lack of irrigation and poor nutrition. Symptoms may be most obvious during periods of stress including high temperatures and drought. It is essential that soil samples that include root mass are taken from affected areas of turf in order to determine nematode populations and species type. Absence of, or low numbers of potentially damaging nematodes in soil samples from affected areas should not automatically be interpreted as absence of nematode risk, due to nematode population cycling. Several soil samples taken from the same area at different times and under different environmental conditions should be considered if initial samples indicate low parasitic nematode numbers and other causes of damage are not apparent.

APPLICATIONS OF ECO-NEMGUARD™ TO TURF: Due primarily to irregularities in the uniformity of egg hatch and dynamics of infection, at least three sequential applications of eco-nemguard™ are usually required to significantly reduce numbers of endo-parasitic nematodes, irrespective of the presence of eco-parasitic nematodes as the primary target. If endo-parasitic nematodes are the primary target, applications of eco-nemguard™ must coincide with emergence and migration of J2 nematodes throughout the root zone.

If eco-parasitic nematodes are the only target, applications of eco-nemguard™ can be initiated at any time during favourable environmental conditions. It is recommended that three sequential applications of eco-nemguard™ are applied to significantly reduce populations of eco-parasitic nematodes, although substantial reductions in populations can be achieved by a single application.

CONDITIONS AT TIME OF APPLICATION OF ECO-NEMGUARD™ TO TURF: It is essential that turf condition will allow percolation of eco-nemguard™ through the root zone to a depth of at least 10 cm. Irrigate between 5-10 mm

immediately after application depending on conditions at the time. When mixed with water this product will give off a strong garlic odour which may cause tearing effects. eco-nemguard™ is a fully biodegradable insecticidal material, breaking down naturally in the soil without leaving residues.

MIXING AND SPRAYING: eco-nemguard™ is a soluble concentrate that easily disperses with water. eco-nemguard™ solutions can be sprayed through typical handheld or tractor mounted spraying equipment. Wash spray equipment thoroughly after use.

COMPATIBILITY: Do not tank mix eco-nemguard™ with other chemicals.

PRECAUTIONS:

Re-entry: Do not allow entry into treated areas until spray has dried. If prior entry is necessary wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT: Toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL: Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

SAFETY DIRECTIONS: Irritant to skin, eye, mucous membranes and upper respiratory tract. Breathing vapour or spray mist is harmful and may cause an asthma-like reaction. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When preparing product for use wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length chemical resistant gloves and face shield or goggles. If clothing becomes contaminated with product, remove clothes immediately. If product, spray or drench on skin, immediately wash area with soap and water. If product, spray or drench in eyes, wash it out immediately with water. After use and before eating, drink or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

To be read in conjunction with the full product label:
Harmful if swallowed.
May cause an allergic skin reaction. Contaminated clothing should not be allowed out of the workplace.
Wear a suitable respirator.



FIRST AID: Irritant to skin, eye, mucous membranes and upper respiratory tract. Breathing vapour or spray mist is harmful and may cause an asthma-like reaction. May cause allergy. If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126, New Zealand 0800 764 766.

FOR EMERGENCIES ONLY CALL AUSTRALIA: 1800 220 770 (24 HOURS).

SAFETY DATA SHEET:

Additional information is listed in the Safety Data Sheet available from the supplier and ocp.com.au.

The OCP drop device is a registered trade mark and eco-nemguard is a trade mark of Organic Crop Protectants.

APVMA Approval
No. 88489/128555

100% Magnification Barcode
9336099000937

BATCH NO:

DOM:

eco-nemguard™ Organic Nematicide

Active Constituent: 1280 g/L garlic extract containing a minimum 26 g/L total polysulfides

RESTRAINTS:

FOR PROFESSIONAL USE ONLY.

DO NOT apply more than six applications in a 12 month period.

DO NOT apply more than 4 litres of product per hectare for crops.

DO NOT mix and apply eco-nemguard™ in enclosed or poorly ventilated places.

DO NOT use on plants inside domestic or commercial premises and places of work.

DO NOT use on soil with high silt content and clay soils.

SPRAY DRIFT RESTRAINTSSpecific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

DO NOT allow bystanders to come into contact with the spray cloud. DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone table/s below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion

conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets are not smaller than a COARSE spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas are observed (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers')

BUFFER ZONES FOR BOOM SPRAYERS

Application Rate	Boom height above the target canopy	Mandatory downwind buffer zones
		Natural aquatic areas
Up to 20 L/ha	0.5 m or lower	Not required
	≥ 0.5m to 1 m	15 metres

DIRECTIONS FOR USE (All states):

CROP	DISEASE	RATE	CRITICAL COMMENTS
All vegetables (in field and protected situations)	Parasitic nematodes living freely in the soil.	4L/100L as a drench or 4 L/ha via irrigation	The use of eco-nemguard™ nematicide has not been fully evaluated in all species or all situations where treatment may be undertaken. It is recommended to treat a sample area and assess appropriately prior to whole crop treatment. Trays and Pots: Apply no more than one application to moist soil as a drench to the propagation tray, the transplant hole or, to plants within a day of transplanting. Apply 5mL of dilute solution to each plant in trays or pots. Apply 2L of dilute solution per m ² of propagation tray or transplants. Trickle Irrigation* Apply 4 L/ha uniformly by trickle irrigation within the top 5-10 cm of soil, in a 20 - 40 cm band along the planted rows. Use rate solutions should not be less than 0.1% and not more than 0.25% when diluted with water. Maximum efficacy will be obtained if the product introduced at the end of an irrigation cycle, thereby reducing drainage loss. Apply up to six times at about 14-day intervals. Irrigate treated areas for optimum wetness. See eco-nemguard™ manual for directions about appropriate irrigation. *or similar systems equipped with an accurate flow metering system.
Amenity turf grass	Parasitic nematodes living freely in the soil.	Watering can or hand sprayer: Mix 40mL/L water or 360mL in a 9L watering can Tractor sprayer: 20L/ha	Apply as spray onto the surface of the turf. It is recommended that the product is drenched into the surface of the grass where nematode induced damage is apparent, or nematode populations in the soil are at risk thresholds. If in doubt seek expert advice prior to treatment. Watering can or hand sprayer: Apply 9L to 20 m ² of lawn and water in after application Sequential applications at between 7 and 14-day intervals may increase the level of nematode population reductions. It is recommended that no more than three applications are linked in any treatment sequence. The use of soil sampling to determine nematode populations prior to commencing use of eco-nemguard™ is recommended and will help to ensure that applications are made to coincide with nematode activity. The upper soil horizon should be moist and freely draining with percolation expected to reach 10cm in depth following eco-nemguard™ application. If soil conditions are dry, irrigate prior to application so the soil is adequately moist. Irrigate between 5-10 mm immediately after applying eco-nemguard™ depending on conditions. Irrigation may not be necessary if a similar amount of rain is imminent.

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL, UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION**WITHOLDING PERIODS:** Not required when used as directed.

STORAGE AND DISPOSAL: Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

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