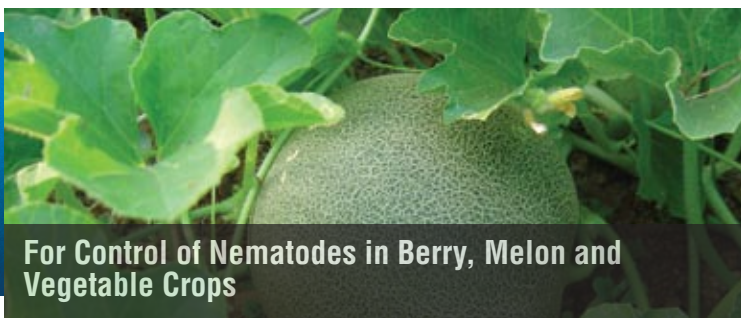


MeloCon® WG
BIOLOGICAL NEMATOCIDE



For Control of Nematodes in Berry, Melon and Vegetable Crops

**Introducing MeloCon® WG
Bionematicide**

Features:

**Natural fungal parasite
of nematodes**

**Broad activity against many
important nematode pests**

**No effect on nontarget or
beneficial species**

**Drip, drench, or microjet
application**

4 hour REI and zero PHI

Always read and carefully
follow label directions.

MeloCon® WG is a new biological nematicide from Certis USA for control of nematodes infesting vegetables, fruits, and other crops. The active ingredient of MeloCon is a natural soil-dwelling fungus (*Paecilomyces lilacinus* Strain PL251) which parasitizes many types of plant parasitic nematodes, including root knot (*Meloidogyne*), sting (*Belonolaimus*), burrowing (*Radopholus*), cyst (*Globodera* and *Heterodera*), root lesion (*Pratylenchus*), and other economically important nematodes species. MeloCon has no adverse impact on crops or nontarget organisms, including beneficial nematodes which attack soil insect pests. It can be applied up to and including the day of harvest, and can be used on both conventional and organic crops.

Each gram of MeloCon WG contains at least 10 billion spores of the PL251 fungus formulated on a water-soluble sugar carrier for easy mixing and application. An application rate of 2 pounds of MeloCon WG per acre is the equivalent of nearly 1.5 million spores per square inch. These spores germinate upon contact with nematode eggs, juvenile stages, and adults in the soil. The growing fungus engulfs and penetrates the nematode over a period of several days, killing it by consuming its body contents.

Application of MeloCon WG

For application, MeloCon WG is mixed with water and applied to nematode-infested soil either as a soil drench, or through drip (trickle) or sprinkler (microjet) irrigation systems. Application efficiency may be enhanced by inclusion of a soil wetting agent to help the spores penetrate soil to the root zone, especially in deeper-rooted crops. Vegetables and other transplants can be treated just before

transplanting with a soil drench to protect from nematodes entering the developing root ball in the field. Nonfumigated field soils should be treated with MeloCon WG two weeks before seeding or transplanting to reduce initial nematode infestation. Application can then be repeated every 6 weeks after planting to keep nematodes suppressed during the crop period.

MeloCon WG can also supplement soil fumigation for control of nematode damage. In freshly fumigated soil, MeloCon WG should first be applied by drench or drip irrigation at planting or transplanting. Subsequent applications should be at 6 week intervals. MeloCon WG can be especially useful in double-cropped situations where soil fumigation is not possible between the first and second crops. Unlike soil fumigation, MeloCon WG requires no waiting period before the second crop can be planted into the existing bed.

Read the product label and additional Section 2(ee) recommendation for specific use rates and other information regarding application of MeloCon WG.

MeloCon WG in the Soil Environment

The PL251 fungus in MeloCon WG is an obligate parasite of nematodes; it does not colonize the root or feed on root exudates. In the absence of nematodes, spores of PL251 decline in the soil over a period of 3 to 6 weeks at a rate depending on soil type and temperature. In loamy sand the half-life of MeloCon WG was determined to be about 1 month at 68°F, and about 3 weeks at 82°F. Spore persistence is greater in soils with high organic matter than in sandy soils.

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MeloCon WG bionematicide is approved for use on organic crops under the USDA National Organic Program (NOP). Listing by the Organic Materials Review Institute (OMRI) is pending.

MeloCon WG is manufactured in Germany by ProPhyta Biologischer Pflanzenschutz GmbH and marketed in the United States by Certis USA.



*Grower trial in a canteloupe field near Plant City, Florida infested with sting nematode (*Belonolaimus longicaudatus*). Plant beds in the upper photo received drip application of MeloCon WG at 4 lb/acre at transplanting and two additional applications at 3–4 week intervals afterward. Lower photo shows areas of dead/missing plants and reduced canopy development in beds where no MeloCon was applied.*

Photos by Joe Craig, Certis USA (May 2009).

Spores of PL251 become active in soil above 68°F, with optimal temperature for germination and growth between 75 and 85°F. In northern climates, MeloCon WG should be applied between late spring and early fall when nematodes are most active and when soils are warm enough to facilitate spore germination and fungal growth. At lower temperature, spores may persist in the soil but will not become active against nematodes until the soil warms to 68°F.

Storage and Handling

MeloCon WG is stored frozen by Certis USA and at distributor locations in order to ensure high spore viability and optimal infectivity to target nematode species upon application in the field. It is delivered to the end user in insulated foam boxes containing ice packs, and should be applied to the field as soon as possible upon arrival. If necessary, MeloCon WG can be refrigerated (40°F or below) for up to 6 months.

CERTIS
The Biopesticide Company