

Methyl Bromide Phase Out Deepens Nematode Concerns

Introduction of MeloCon® WG is Welcomed

At trade shows and farm shows, grower meetings and local eateries, growers

are voicing concerns about the phase out of methyl bromide. Its impending loss, according to the University of Florida, "is the single most important challenge facing the vegetable and small fruits industries today." Certainly control of nematodes, especially sting nematodes in strawberries, will become more difficult. But with the introduction of MeloCon® WG, grower discussions have turned positive as grower and university trials show great promise for the biological nematicide.

MeloCon controls sting, root-knot and burrowing nematodes in fruit, vegetable, vine, tuber, row and ornamental crops. Its active ingredient are the spores of a naturally occurring fungus, *Paecilomyces lilacinus*, that is a highly effective parasite of all stages of development of common plant-infecting nematodes. Dr. Mike Dimock, Director of Field Development and Technical Services for Certis said MeloCon is particularly effective on eggs and infectious juveniles.

A biopesticide, MeloCon has minimal impact on the environment and non-target species. "But there is nothing



MeloCon fungus engulfing nematode eggs.
Photo: R. Holland, Macquarie Univ., Australia.

"...The spores germinate and penetrate the nematode, killing it by feeding on the nematode's body contents. MeloCon is brutal to nematodes and highly effective."

light-weight about MeloCon and how it effects nematodes," Dr. Dimock said. "Once it is applied to soil, spores of the MeloCon fungus adhere to the bodies of nematodes as they move through the soil. The spores germinate and penetrate the nematode, killing it by feeding on the nematode's body contents. MeloCon is brutal to nematodes and highly effective."

MeloCon can be used as a pre-plant, transplant or post-plant treatment. Formulated as a water dispersible granule, MeloCon is applied through conventional methods, including chemigation through drip or micro-sprinklers. Dr. Dimock said the product should then be watered-in. That will help move the spores of MeloCon down to the rhizosphere of the plant's root where the majority of the plant parasitic nematodes are found.

Dr. Dimock said the introduction of MeloCon does not negate the loss of methyl bromide, "but it certainly becomes a viable option for the control of nematodes."

Meet and Greet At the Expo

Joe Craig is the Certis Regional Manager for Florida and the Gulf Region. Craig says to be sure and pay him a visit at the Certis USA booth on October 28 at the Florida AG Expo. "I'll be glad to answer your questions about MeloCon WG, SoilGard or any of our other biopesticide products," Craig said. The Expo will be held at the Gulf Coast Research and Education Center in Balm, FL.



Comments Heard In the Year 1955

"The post office is thinking of charging 7 cents just to mail a letter!"

"Things are so tough nowadays, I see where a few married women are having to work to make ends meet."

"Drive-in restaurants are convenient in nice weather, but I seriously doubt they will ever catch on."

"Thank goodness I won't live to see the day when the Government takes half our income in taxes."

"If they think I'll pay 30 cents for a hair cut, forget it."

SoilGard®: The Fungicide that Fights

Pit nature against nature to control diseases that can impact and retard early root development in plants. Select SoilGard fungicide to battle damping-off diseases, because the way SoilGard goes to war against disease, Dr. Brett Highland says, is simply “awesome.”

Dr. Highland is the Eastern U.S. Field Development Manager for Certis USA, the manufacturer of SoilGard. Dr. Highland said the active ingredient in SoilGard is *Trichoderma virens*, a naturally occurring soil fungus that is antagonistic to plant



SoilGard fungus strangling *Rhizoctonia*.
Photo: USDA.

“When you apply SoilGard to your soil, you are—in effect—creating a battlefield of fungi versus fungi.”

pathogenic fungi. “When you apply SoilGard to your soil, you are—in effect—creating a battlefield of fungi versus fungi. The SoilGard fungus is aggressive and in competition with fungi that cause damping off diseases, I would want *T. virens* in my corner every time.”

SoilGard employs four different modes of action in its fight against pathogenic fungi. 1) Uniquely, once it

is applied to soil, SoilGard produces a “gliotoxin” that kills and inhibits the growth of other fungi, Dr. Highland said. 2) SoilGard can also penetrate and consume parts of other fungi it comes into contact with. 3) Because it is so aggressive, it grows quickly and out-competes pathogenic fungi for nutrients and living space. 4) Eventually SoilGard occupies so much of the acreage around the plant’s root zone, it prevents or delays the reestablishment of the disease-causing fungi. To deploy all four modes of action, it is best to apply SoilGard to young plants or transplants.

This year, put SoilGard in your fight against soil-borne disease. Let the battle begin!



Quote of the Day

“The trick of living is to slip on and off the planet with the least fuss you can muster. I’m not running for sainthood. I just happen to think that in life we need to be a little like the farmer, who puts back into the soil what he takes out.”

Paul Newman, Actor



Did you know...

Nematodes are one of the more diverse animals in the world. There are thousands of species of nematodes yet to be identified.