

DEBUG TURBO FOR NEMATODE CONTROL

DEBUG TURBO is a viable alternative that will address the serious shortcomings created by Methyl Bromide phase out and restrictions on the use of Telone. Debug Turbo is registered in the U.S. for use against nematodes.

Debug Turbo is a unique formulation consisting of Cold pressed neem oil, (liminoids, triterpinoids, oil of Neem etc), azadirachtin and a synergist. Extract of the neem seed and synergist is presented as an emulsified concentrate. The synergist enhances the nematicidal, pesticidal and fungicidal action.

Neem bio-mass contains several chemicals (e.g. azadirachtin, nimbinocinol, nimbin, etc.), that have been reported to have nematicidal properties. The mechanisms by which nematode pests are controlled by neem biomass is not yet fully understood, mainly because the complex nature of the soil environment hampers the elucidation of the different activities and interactions that occur. Nematode control results from release of toxic compounds which are delivered at present at sublethal concentrations in the rhizosphere of crop plants. Nematode populations are affected by these treatments through leached nematicide which repelled or killed nematode juveniles that attacked the host root. Neem extract has also exhibited inhibition of egg hatch and larval mortality.

DEBUG TURBO

Easy to deliver to soil
drip or sprinkler

Safe - Can be used near or in side the housing or urban complexes. Also approved for Organic & Home Garden use

No buffer zone restrictions. Farmers can use their land to its full extent.

WSDA approved for organic use

Effective at 104 oz (3.25 Qts) per acre.

Safe to environment.

No restriction on application

No restriction on planting

Low REI (4 hours) and
PHI

METHYL BROMIDE / TELONE

Need special equipment, suits etc
which adds to cost

Can not be applied within 100 / 300 feet of urban complexes. Severe restrictions on their use.

Buffer zone restrictions takes large areas out of production.

Human Carcinogen – Telone & MeBr
Category 2 pesticide

Permitted level 20-30 gallons /acre.

Enters ground water, ambient air,
Ozone layer depletion etc.

Planting allowed only
1 week after treatment

REI 7days

TRIALS

Field trial conducted on the nematode control properties, and yield characteristics of **Carrots** by Dr John D. Radewald. Treatment provided considerable **Root knot nematode** control expressed in saleable carrots (Grade1 and 2). The yield was 23% over control and 30% over Telone.

Field trials were conducted on the **Root knot nematode** control properties, and yield characteristics on **Tomatoes**. The results indicate that our product is as effective as Telone, and 18% or more better than control.

Conducted by Del Monte in Hawaii, on **Pineapple - Reniform nematode**. Lowest nematode count was observed in our plots compared to Vydate and control (2056).The treated Pineapple weighed 21% more than control.

Trial conducted on a Golf course in the Pebble beach area, When compared to untreated check plots, Debug Turbo showed the greatest reduction in **Anguina Pacificae** induced turfgrass injury of all products evaluated. Our product showed better turf quality than the untreated check on all six rating dates.

Ongoing Trials

University of Idaho, Efficacy of potato yield and nematode population. There was a significant reduction in root knot nematode population with an increase of tuber yield in the Debug Turbo treated plots compared to untreated control.

University of California Extension, Ukiah, CA. Wine grapes. Expect to complete in Spring 2012.

Other Research papers on Neem biomass

In research trials, potting soil amended with plant parts from the neem tree and Chinaberry tree (*Melia azadirach*) inhibited root-knot nematode development on tomatoes. (Siddiqui and Alam, 2001).

Debug Turbo complies with the **National Organic Program rules** for organic production, It is **USEPA** approved for insect and nematode control and is **WSDA** approved.

If you have any questions, please call Agro Logistic Systems Inc. at 1-714-990-9220