

## MeloCon<sup>®</sup> WG

BIOLOGICAL NEMATOCIDE



MeloCon WG biological nematocidal contains spores of a beneficial fungus which must germinate and grow in order to infect and kill plant-parasitic nematodes in the soil. For some applications it may be desirable to mix MeloCon WG with other products to also control insects and diseases or to enhance soil penetration.

**Table 1** lists some soil-applied fungicides, insecticides, and other agricultural chemicals that have been found to have no adverse effects on spore germination and fungal growth under simulated tank mix conditions in the laboratory. These materials can be mixed with MeloCon WG for application without impacting efficacy against nematodes.

**Table 1. Agricultural Chemicals Having No Adverse Effect on Viability of MeloCon<sup>®</sup> WG.**

Active Ingredient	Chemical Group	MOA Code*	Product Trade Names
<b>Fungicides</b>			
Fosetyl-aluminum	Phosphonate	33	Aliette <sup>®</sup>
Metalaxyl	Phenyl amide	4	Ridomil <sup>®</sup>
PCNB (quintozene)	Aromatic hydrocarbon	14	Terraclor <sup>®</sup>
Propamocarb hydrochloride	Carbamate	28	Tattoo <sup>®</sup> , Previcur <sup>®</sup>
<b>Insecticides &amp; Nematicides</b>			
Aldicarb	Carbamate	1A	Temik <sup>®</sup>
Bifenthrin	Pyrethroid	3A	Talstar <sup>®</sup> , Capture <sup>®</sup>
Carbofuran	Carbamate	1A	Furadan <sup>®</sup>
Ethoprop	Organophosphate	1B	Mocap <sup>®</sup>
Fenamiphos	Organophosphate	1B	Nemacur <sup>®</sup>
Fipronil	Phenylpyrazole	2B	Chipco <sup>®</sup> Choice <sup>™</sup>
Fosthiazate	Organophosphate	1B	Nemathorin <sup>®</sup>
Furfural	Aromatic aldehyde		Multiguard <sup>®</sup> , Agriguard <sup>®</sup>
Imidacloprid	Neonicotinoid	4A	Admire <sup>®</sup> , Marathon <sup>®</sup> , Provado <sup>®</sup>
Oxamyl	Carbamate	1A	Vydate <sup>®</sup>
Terbufos	Organophosphate	1B	Counter <sup>®</sup>
<b>Herbicides</b>			
EPTC	Thiocarbamate		Eptam <sup>®</sup> , Eradicane <sup>®</sup>
Metolachlor	Chloroacetanilide		Dual <sup>®</sup> , Bicep <sup>®</sup>
Metribuzin	Triazine		Sencor <sup>®</sup> , Lexone <sup>®</sup>
<b>Adjuvants</b>			
Alkoxylated polyols + glucoethers	Soil wetting agent		WaterMaxx <sup>®</sup> 2, IrrigAid <sup>®</sup> Gold
Citric acid + garlic extract	Wetting agent/buffer		BioLink <sup>®</sup> Buffer
Ethoxylated copolymers	Soil wetting agent		PeneCal <sup>®</sup>
Linear alcohol + siloxane	Soil wetting agent		Quadra-Tek <sup>®</sup>
Polyether/polymethylsiloxane copolymer	Wetting agent		Break-Thru <sup>®</sup>
Polyethylene sorbitan monolaurate	Wetting agent		Tween <sup>®</sup> 20
Yucca saponins	Wetting agent		Saponyn <sup>®</sup> , ThermX <sup>®</sup>
Yucca saponins + garlic extract	Wetting agent		BioLink <sup>®</sup>

\*Fungicide Resistance Action Committee (FRAC) code or Insecticide Resistance Action Committee (IRAC) group based on mode of action, if applicable (as of November 2009).

**Table 2** lists fungicides that caused significant reduction in viability of the beneficial fungus in laboratory tests. These products should not be mixed with MeloCon WG for application. Allow at least 2 weeks between applications of MeloCon WG and these materials.

**Table 2. Fungicides That Reduced Spore Viability and Growth (Do Not Mix With MeloCon<sup>®</sup>)**

Active ingredient	Chemical Group	FRAC Code	Product Trade Names
Azoxystrobin (stobilurin)	Methoxyacrylate	11	Amistar <sup>®</sup> , Heritage <sup>®</sup> , Quadris <sup>®</sup> , Abound <sup>®</sup>
Chlorothalonil	Chloronitrile	M5	Bravo <sup>®</sup> , Daconil <sup>®</sup> , Echo <sup>®</sup> , etc.
Mancozeb	Diothiocarbamate	M3	Dithane <sup>®</sup>
Benomyl	Benzimidazole	1	Benlate <sup>®</sup>
Propiconazole	Triazole	3	Tilt <sup>®</sup> , Banner MAXX <sup>®</sup>
Tebuconazole	Triazole	3	Folicur <sup>®</sup>
Cyazofamid	Cyanoimidazole	21	Ranman <sup>®</sup>
Fenamidone	Imidazolinones	11	Reason <sup>®</sup>
Captan	Phthalimides	M4	Captan <sup>®</sup>

**Using MeloCon With SoilGard<sup>®</sup>**

MeloCon can be used in a program with SoilGard 12G biofungicide to control both plant-parasitic nematodes and soilborne diseases, as an alternative or supplement to methyl bromide or other soil fumigants. However, MeloCon and SoilGard should not be mixed together in the same application. Upon application to the soil, the beneficial fungus in SoilGard produces a potent antimicrobial compound that kills and inhibits spore germination of other fungi in the immediate vicinity. Wait at least 3 days after SoilGard application to apply MeloCon when the effect of the antimicrobial compound has

dissipated. Allow at least 2 weeks after a MeloCon application before applying SoilGard.

**Using MeloCon After Soil Fumigation**

Soil fumigants, such as methyl bromide, chloropicrin, iodomethane (Midas<sup>®</sup>), metam sodium (Vapam<sup>®</sup>), or metam potassium (K-Pam<sup>®</sup>) may kill or inhibit the beneficial fungus in MeloCon. Apply MeloCon to recently fumigated soil only after fumigant gases have dissipated. Refer to the fumigant label to determine the safe planting interval after fumigation. MeloCon can be applied as soon as it is safe to plant the crop.

*DISCLAIMER: This technical bulletin is not a recommendation to mix MeloCon with any specific product. Mix only with products for which such mixing is permitted by the label for that product. Test the physical compatibility of unfamiliar mixtures by combining small amounts of the products in the intended proportions and mix order before actual use ("jar test"). This technical bulletin may be updated as new information becomes available.*

