

# **FRUITING VEGETABLES, LEAFY VEGETABLES, ETC - FIELD SOILS BEFORE PLANT OR TRANSPLANTING**

## General Information

### PRODUCT INFORMATION:

MeloCon WG is a water dispersible granule formulation containing spores of a soil fungus that parasitizes many species of plant-parasitic nematodes. MeloCon WG is intended for use as part of an Integrated Pest Management (IPM) system. When used as part of a complete pest management program, MeloCon WG reduces crop damage by plantparasitic nemotodes.

### MIXING DIRECTIONS:

- Determine the total volume of water needed for application according to the application tables below.
- Fill the spray tank to approximately 3/4 (three-fourths) of the desired volume with clean water and begin agitation.
- Add the specified amount of MeloCon WG to the tank (consult application tables below). Do not allow spray mixture to stand overnight or for longer than 24 hours. Finish filling the tank to the desired volume that provides maximum coverage.
- Maintain agitation throughout the mixing and application process.

### Tank Mixing:

- Application efficiency may be enhanced by inclusion of a soil wetting agent to help the spores penetrate soil into the root zone.
- Do NOT mix MeloCon WG with chlorothalonil, mancozeb, triazole or strobilurin fungicides.
- Do not mix with strong acids, bases or other caustic materials. Maintain a neutral or slightly acidic pH (6-7) in the spray tank.
- Mix MeloCon WG 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”). Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

- For information on which adjuvants and pesticides can be mixed with MeloCon WG without harming the beneficial fungus it contains, contact your Technical Sales Representative or the Manufacturer.

- For preparation of a tank mix, add the other products first. If the other products are likely to cause foaming, however, add them after filling up the tank to the desired volume of water. Then add MeloCon WG.

#### INSTRUCTIONS FOR MeloCon WG APPLICATION THROUGH IRRIGATION SYSTEMS

Application through Drip (Trickle) or Sprinkler Irrigation:

Apply MeloCon WG only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or handmove, and drip (trickle), including micro-irrigation, systems and either before planting or to the planted crop/use site at the appropriate rates indicated in the previous table. If applied in this manner, irrigate with enough water to saturate the soil to the depth of the root zone. Addition of an approved soil wetting agent at the manufacturer’s specified mix rate may enhance penetration of spores to the rooting zone. For information on which adjuvants and pesticides can be mixed with MeloCon WG without harming the beneficial fungus it contains, contact your Technical Sales Representative or the Manufacturer.

Do not apply MeloCon WG through any irrigation systems other than those specified above.

Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.

If you have questions about calibration of your irrigation system, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the pesticide application system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### Pesticide Application Using Public Water Systems:

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Pesticide application systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoidoperated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Apply the entire treatment during the first 1/3 of the total irrigation.
9. Mix MeloCon WG in the supply tank to a concentration appropriate to cover the area to be treated.
10. Agitation is required for mixing and maintaining the suspension of the spores of the active agent in the injection solution. Apply all MeloCon WG within 24 hours after mixing with water.

#### Pesticide Application Using Drip (Trickle) Irrigation:

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid- operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection

pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. Apply the entire treatment during the first 1/3 of the total irrigation.

8. Mix MeloCon WG in the supply tank to a concentration appropriate to cover the area to be treated.

9. Agitation is required for mixing and maintaining the suspension of the spores of the active agent in the injection solution. Apply all MeloCon WG within 24 hours after mixing with water.

#### Pesticide Application Using Sprinkler Irrigation:

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid- operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

5. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Apply the entire treatment during the first 1/3 of the total irrigation.
9. Mix MeloCon WG in the supply tank to a concentration appropriate to cover the area to be treated.
10. Agitation is required for mixing and maintaining the suspension of the spores of the active agent in the injection solution. Apply all MeloCon WG within 24 hours after mixing with water.

#### Pesticide Application Using Micro-irrigation:

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid- operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Apply only when the irrigation is soil directed, the heights of the nozzles are

below the canopy and irrigation water does not come into contact with aboveground harvestable food commodities.

8. Apply the entire treatment during the first 1/3 of the total irrigation.

9. Mix MeloCon WG in the supply tank to a concentration appropriate to cover the area to be treated.

10. Agitation is required for mixing and maintaining the suspension of the spores of the active agent in the injection solution. Apply all MeloCon WG within 24 hours after mixing with water.

### Limitations, Restrictions, and Exceptions

#### Application rates and instructions

Apply 2 to 4 pounds of MeloCon® WG per acre. Applications can be made by the following methods:

- Drenching, drip (trickle) or sprinkler application (see “Instructions for MeloCon WG Application through Irrigation Systems”). To enhance penetration of spores into the root zone, consider mixing MeloCon WG with a soil wetting agent.
- Surface spray on moist soil with 40-100 gallons water per acre followed by incorporation using light tillage.
- Surface spray with 20-40 gallons water per acre followed by overhead irrigation. Use enough irrigation water to wet the soil into the root zone.
- Direct injection to anticipated root depth using shank or other soil injection equipment. Apply with 30-40 gallons water per acre.

Pre-plant applications may be either broadcast over an entire field or concentrated (banded) into planting rows.

Apply when soil temperature at 4-inch depth is 60°F or higher. Bioactivity of MeloCon® WG is greatest at soil temperatures between 70° and 90°F.

Apply to nematode-infested (non-fumigated) soil up to 14 days before planting or transplanting.

Follow up with applications on the field soil at or after planting or transplanting (see

third section below).

If the soil has been fumigated recently (within 2 weeks), make the initial MeloCon WG application to transplants just before transplanting into the field, as described in the section that follows. Alternatively, apply MeloCon WG to fumigated soil at or after planting or transplanting (see third section below).

Method

[Drench](#)

[Broadcast](#)

[Sprinkler Irrigation](#)

[Surface spray](#)

[Direct injection](#)

[Drench](#)

[Broadcast](#)

[Sprinkler Irrigation](#)

[Surface spray](#)

[Direct injection](#)

[Drench](#)

[Broadcast](#)

[Sprinkler Irrigation](#)

[Surface spray](#)

[Direct injection](#)

Restricted Entry Interval

4 hours

EXCEPTION: If the product is soil incorporated or soil injected, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

[Preplant](#)

[Transplant](#)

[Transplant](#)