

GENERAL INFORMATION

MycoApply® EndoMaxx is a suspendable powder that contains living propagules of multiple species of arbuscular mycorrhizal fungi that colonize the rhizosphere of plants in a symbiotic manner. The mycorrhizal fungi expand out beyond the plant roots or rhizosphere region of the soil surrounding the plant roots to acquisition nutrients and water.

Arbuscular mycorrhizal fungi form symbiotic associations with roots of most agriculturally important crops¹. MycoApply® EndoMaxx improves plant vigor by enhancing the root system's ability to efficiently absorb water and nutrients under variable environmental conditions throughout the entire crop cycle.

MycoApply® EndoMaxx contains 22,500 propagules per gram of the following four mycorrhizal species: *Glomus intraradices, Glomus mosseae, Glomus aggregatum, Glomus etunicatum.*

MycoApply® EndoMaxx is NOP compliant and OMRI listed for organic production.

¹ For additional crop recommendations, other than those listed in this label, consult your crop advisor or Valent Agricultural Specialist (1-800-6-Valent).

GENERAL USE INSTRUCTIONS

MycoApply® EndoMaxx is a suspendable powder that can be applied as: an in-furrow spray at planting, transplant water treatment, hill drench at planting, surface band at planting, soil shank injection at planting, or by chemigation. This product can also be applied directly to plants grown in the greenhouse for transplanting purposes.

- MycoApply® EndoMaxx can be used on newly seeded, transplanted or established crops. The goal is to make physical contact between the inoculum and the roots. Direct the application of MycoApply® EndoMaxx near the living root or seed of the plant, where new roots will grow through it.
- Since MycoApply® EndoMaxx is most effective when the host plant requires nutrients for optimal plant growth, excessively high levels of phosphorous fertilizer used at planting may reduce the ability of EndoMaxx to colonize the plant.

COMPATABILITY WITH OTHER AGRICULTURAL PRODUCTS

Compatibility and performance data for MycoApply® EndoMaxx with other agricultural products are limited. Do not tank-mix MycoApply® EndoMaxx with other products unless compatibility has been verified. If considering tank mixing MycoApply® EndoMaxx with other products use the following compatibility jar test before mixing an entire tank:

Add water from the same water source to a clear glass or plastic jar. Add the products in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Separation, gelling, or generation of heat are all signs of incompatibility.

Always read and follow all label directions and precautions for each product. When using combinations of products the most restrictive label limitations and precautions must be followed. Do not mix MycoApply® EndoMaxx with any product that has a prohibition against tank-mixing. For further information consult your Valent agricultural specialist.

SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying MycoApply® EndoMaxx. Fill spray tank ¼ to ½ full of water. Add MycoApply® EndoMaxx directly to the spray tank. Mix thoroughly to fully disperse the product. Once dispersed and suspended, continued agitation is required (mechanical or hydraulic).

Avoid storage of mixed spray solutions for periods greater than 24 hours. Re-suspension of the spray solution after storage is critical.

IMPORTANT: After mixing with water, shake or stir vigorously. Maintain continuous agitation in the mix tank during mixing and application to assure a uniform suspension. When spraying MycoApply® EndoMaxx, use filters or screens no smaller than 50# mesh.

DIRECTIONS FOR APPLICATIONS THROUGH SUBSURFACE DRIP TAPE

MycoApply EndoMaxx can be applied through subsurface drip tape, so as to treat the soil around the crop root zone.

Fill the tank with ½ to ¾ of the determined amount of water. Start mechanical and/or hydraulic systems to provide maximum agitation. Add 1/3 to ½ of the MycoApply EndoMaxx and allow mixing until thoroughly suspended. Add the remaining product slowly while bringing water to the determined volume. Agitate the mixture of MycoApply EndoMaxx constantly during the chemigation period to assure a uniform distribution throughout the system.

Inject MycoApply EndoMaxx downstream of sand and/or screen filters smaller than 50 mesh. Apply during the final half of the irrigation run, concluding the injection 1 to 2 hours before the endo of the irrigation run.

APPLICATION INSTRUCTIONS FOR CROP CATEGORIES

CROP	APPLICATIONS	PLANTING RATE (plants/acre)	USE RATE
Vegetable Transplants:	Pre-Plant Tray	<15,000	4-6 g/acre
Leafy Vegetables	Drench		
(lettuce, celery, etc.)	OR	15,000-30,000	6-8 g/acre
 Fruiting Vegetables 	At-Plant		
(tomato, pepper, etc.)	Transplant Water	30,000-45,000	8-10 g/acre
Cucurbits	OR		
(melons, pumpkin, squash, etc.)	Subsurface	>45,000	10-12 g/acre
	Drip Tape		

- When applying MycoApply® EndoMaxx as a transplant tray drench, it is important that:
 - Uniform distribution of drench is made to moist potting media.
 - Sufficient water volume is used, allowing movement of product into the root zone.
 - No more than 10% run through of solution occurs.
 - Application is made between seeding and 2nd true leaf stage for best results and maximum time for establishment.
- For at-plant transplant water applications, apply solution to the soil using hand-held, mechanical or motorized equipment. Maintain continuous agitation during application. Delivery of MycoApply EndoMaxx should be in such a manner that the treated water reaches the transplant roots or is applied below or to the side of the transplant so new root growth reaches the product.

CROP	APPLICATIONS	USE RATE
Seeded Vegetables:	In-Furrow Spray (at planting)	4-6 g/acre
(carrots, onions, lettuce, beans, tomato, etc.)	OR	
	Post-Plant Banded Spray	
	OR	
	Subsurface Drip Tape (post-plant)	

- For in-furrow treatments, apply in a sufficient spray volume to disperse the propagules in the bottom of the furrow where seeds will fall. Mount spray nozzle so that spray is directed in the furrow just before seeds are dropped and covered.
- For post-plant banded spray applications, incorporate product using overhead irrigation or rainfall, within 72 hours of application. Applying irrigation prior to banded applications can improve movement of Mycorrhizal fungi into the soil.

CROP	APPLICATIONS	USE RATE
Onion Transplants	Bare Root Spray	4-6 g/acre
	OR	
	Pre- or At-Plant Banded Spray	

- Prior to applying MycoApply EndoMaxx as a pre-plant spray to onion roots, remove excess soil from roots.
- Completely spray roots to ensure thorough coverage.
- For banded spray applications, incorporate product using overhead irrigation or rainfall, within 72 hours of application. Applying irrigation prior to banded applications can improve movement of Mycorrhizal fungi into the soil.

CROP	APPLICATIONS	USE RATE
Potato	Seed Piece Treatment	
	OR	6 g/acre
	In-Furrow Spray (at planting)	

For in -furrow treatments, the rate per broadcast acre should remain constant at 2-3 fl oz/acre. However, the rate per linear feet (i.e. 1,000 ft. of row) will vary, depending on row spacing. Use the chart below to determine the MycoApply EndoMaxx rate per 1,000 row feet.

Row spacing	30"	32"	34"	36"	38"
grams/1,000 row feet	0.34	0.37	0.39	0.41	0.44

- For potato seed piece treatment, apply 2-3 fl oz of product onto seed pieces needed to plant one acre. Apply using equipment that ensures uniform and thorough coverage of each seed piece.
- For in-furrow treatments, mount spray nozzle so that spray is directed in the furrow, onto the seed pieces, just before they are covered.
- Since MycoApply EndoMaxx is most effective when the host plant requires nutrients for optimal growth, excessively high levels of phosphorous fertilizer used at planting may increase the time needed for MycoApply EndoMaxx to colonize the plant.

CROP	APPLICATIONS	USE RATE
Strawberry & Cane Berries: (blackberry;	Bare Root Spray	6-8 g/acre
loganberry; raspberry, black and red; wild	OR	
raspberry)	At-Plant Banded Spray	
	OR	
	Subsurface Drip Tape	

- Prior to applying MycoApply EndoMaxx as a pre-plant treatment to strawberry roots, wash transplants to remove excess soil. Completely immerse or spray roots to ensure thorough coverage.
- For at-plant drench applications, apply solution to the soil surface as a drench using hand-held, mechanical or motorized equipment. Maintain continuous agitation during application.

CROP		APPLICATIONS	USE RATE
Sweet Potato		Seed Root (Slip) Treatment OR	4-6 g/acre
		At-Plant Transplant Water	

- Prior to applying MycoApply EndoMaxx as a pre-plant treatment to sweet potato seed roots, wash slips to remove excess soil. Completely immerse seed roots for 1-2 minutes in a well agitated suspension to ensure thorough coverage.
- For at-plant drench applications, apply solution to the soil surface as a drench using hand-held, mechanical, or motorized equipment. Maintain continuous agitation during application. Applying irrigation prior to and post a drench application can improve movement of mycorrhizal fungi into the soil.

CROP	APPLICATIONS USE RATE	
Tobacco	Pre-Plant Tray Drench	
	OR	4-6 g/acre
	At-Plant Transplant Water	

- When applying MycoApply EndoMaxx as a transplant tray drench, it is important that:
 - Uniform distribution of drench is made to moist potting media.
 - Sufficient water volume is used, allowing movement of product into the root zone.
 - O No more than 10% run through of solution occurs.
 - Application is made between seeding and 2nd true leaf stage for best results and maximum time for establishment.
- For at-plant transplant water applications, apply solution to the soil using hand-held, mechanical, or motorized equipment. Maintain continuous agitation during application. Delivery of MycoApply EndoMaxx should be in such a manner that the treated water reaches the transplant roots or is applied below or to the side of the transplant so the plant roots and mycorrhizal fungi can form the symbiotic relationship.

CROP	APPLICATIONS	USE RATE	RATE/1,000 PLANTS
Trees & Vines	Bare Root Spray or	Suggested dilution rate: 5 grams mixed in 3	5 grams
(New Plantings)	Dip	gallons of water. Spray or dip roots of plants	
		prior to planting.	
	Container Drench	Determine drench volume by applying water	8 grams
		to a single container to the point of run-	
		through.	
	In-Field Drench	Apply the diluted mixture around the trunk of	10 grams
	(i.e. Tanking)	each tree. Use sufficient water volume to	
		move product into the root zone, which may	
		include a pre- and post-application irrigation.	

CROP	APPLICATIONS	STAGE OF DEVELOPMENT	RATE/1000 PLANTS
Trees & Vines	In-Field Drench	1 year or less	10 grams
(Established)		2 to 4 years	15 grams
	Directed Spray	1 year or less	10 grams
	(over root zone)	2 to 4 years	15 grams
		5 + years	40 grams

- In-field drench: Apply diluted product around the trunk of each tree or vine during active growth. Use sufficient water volume to allow movement of product into the root zone.
- For directed spray and berm applications, incorporate product using overhead irrigation or rainfall, within 72 hours of application.
- For trees and vines grown with a cover crop between the rows, make an application of MycoApply EndoMaxx to the seed of the cover crop at the time of planting as a seed treatment in the hopper box.

CROP	APPLICATION	USE RATE
Agricultural Trees & Vines	Bare Root Spray	160 grams
in Nursery Production	OR	per
(fruit or nut trees and vines)	Container Drench	36,000 tree seedlings

- Use for tree seedling production (endomycorrhizal trees).
- EndoMaxx can be applied as a bare root spray, or as a container drench.

CROP	APPLICATION	USE RATE
Corn Used For Organic Production (field corn, silage, sweet corn, popcorn)	In-Furrow OR T-Band	4 g/acre

• 5 to 7 inch band over open furrow or apply in-furrow with seed with the goal for the solution to come in contact with the seed and roots when germination occurs.

