

PHC® Colonize™ AG

Colonize AG is a biological inoculant designed to promote the establishment of beneficial plant-microbe-soil interactions in the root zone. Colonize AG utilizes a dual strategy acquired from Nature. First, it is a microbial inoculant containing numerous strains of rhizosphere bacteria and fungi that fix nitrogen, solubilize phosphorus, and recycle mineral nutrients through the breakdown of organic matter. These include spores of select strains of *Bacillus* and *Streptomyces* bacteria, and *Trichoderma* fungi. Second, Colonize AG contains formononetin, an isoflavonoid which increases the degree of root colonization by introduced and native vesicular-arbuscular mycorrhizal (VAM) fungi. Together, the activities of these beneficial bacteria and fungi promote plant health by improving soil fertility and plant nutrition in the natural way. Colonize AG is not a plant food product.

PHC Colonize AG:

- Increases degree of root colonization by native or inoculated VA mycorrhizal (VAM) Fungi
- Introduces a diverse population of beneficial microbes into barren soils, to:
 - Fix nitrogen and solubilize mineral phosphorus
 - Recycle mineral nutrients through the breakdown of organic matter

DIRECTIONS FOR USE

2-PART PACKAGING: Colonize AG is bagged in two-part packaging. Each combination of one large packet and one smaller “D” packet, taken together, comprises one-half pound. Both packets must be mixed in the same tank.

GREENHOUSE PROGRAM

Plug Drench Treatment: Mix Colonize AG with water at a rate of 1-Lb per 100-gallons water and adjust travel speed as needed to treat 800 standard flats. Apply as a drench 1 week after seeding and again 7-10 days before shipping to the field.

FIELD PROGRAM

Transplant Water Treatment: Mix PHC Colonize Ag at 1 lb per 100 gallons of transplant water and apply 3 oz per plant. For transplants that are lined out mechanically, use 1/2 to 1 lb in the amount of transplant (setter) water used for 7,260 row feet.

In-furrow at Planting for Potatoes: Use 1-2 oz PHC Colonize Ag in sufficient water to treat 14,520 row feet. At planting, treat seed species by applying banded-spray or trickle on the seed pieces while the furrow is open, so the seed pieces are contacted by the product.

Drip Irrigation Treatment: Thoroughly mix Colonize AG with water before pouring it into the head bucket (injector box). Use at least 1-gallon of water for each Lb of product. Apply by drip irrigation at a rate of 1/2-Lb (*one large packet and one smaller “D” packet*) per 7260 linear feet of plant bed, or 1.1-oz for each 1000 linear feet. For best results, repeat application throughout the season at 2 to 3 week intervals.

CITRUS AND TROPICAL FRUIT TREE PROGRAM

Drip Irrigation Treatment: Thoroughly mix Colonize AG with water first before pouring it into an agitated mix tank. Apply by drip irrigation at a rate of 1/2-Lb (*one large packet and one smaller “D” packet*) per acre. For best results, repeat application throughout the season at 2 to 3 week intervals. For best results, use with Yuccah® liquid wetting agent.

COMPATIBILITY

Colonize AG is compatible for use with fertilizers, pesticides, biostimulants, wetting agents, or mycorrhizal fungi. Add Colonize AG to the tank after chemical products have already been diluted.

PRECAUTIONS

Any irrigation system used to apply crop treatment products must not be connected to a public water system. Accidental backflow could introduce the chemical irrigation treatments into the public water system. Use effective engineering controls including check valves, vacuum relief valves, and low-pressure drains to prevent water-source contamination resulting from unintended backflow.

MICROBIAL INOCULANT AND VAM FUNGAL STIMULANT FOR AGRICULTURAL APPLICATIONS

GUARANTEED ANALYSIS

ACTIVE PLANT/SOIL AMENDING INGREDIENTS

BENEFICIAL RHIZOSPHERE MICROBES

22.7 Billion cfu/Lb	<i>Paenibacillus azotofixans</i>
22.7 Million cfu/Lb	<i>Bacillus licheniformis</i>
22.7 Million cfu/Lb	<i>Bacillus megaterium</i>
22.7 Million cfu/Lb	<i>Bacillus polymyxa</i>
22.7 Million cfu/Lb	<i>Bacillus subtilis</i>
22.7 Million cfu/Lb	<i>Bacillus thuringiensis</i>
454 Million cfu/Lb	<i>Streptomyces griseoviridis</i>
9 Billion cfu/Lb	<i>Trichoderma harzianum</i>

MICROBIAL NUTRIENTS

61.2%

41%	Maltodextrin
14.2%	Soluble Seaweed extract (derived from <i>Ascophyllum nodosum</i>)
5%	Yeast extract
1%	Yucca plant extract (derived from <i>Yucca schidigera</i>)

HUMIC ACIDS (derived from Leonardite)

18.5%

FORMONONETIN

0.9%

INERT INGREDIENTS

19.4%

8%	Precipitated Silica
8.4%	Leonardite Extract (other than humic acids)
3%	Polyethylene glycol

STORAGE/SHELF LIFE

This product is stable in cool, dry storage conditions. See expiration date on package.

HEALTH AND SAFETY INFORMATION

- In case of allergic reaction(s), treat symptoms and contact physician.
- Avoid breathing dust or spray mist.
- Wash hands after handling.
- In case of ingestion, seek medical attention.
- **Keep out of reach of children.**

PACKAGING

5-Lb box

TECHNICAL ASSISTANCE

For technical assistance, call 1-800-421-9051



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