

## Applications and Recommended Dosages

Treatment	Media	Dosage	Frequency
Individual shrub or sapling	Soil	Mix 2oz (or 4 Tablespoons) per one gallon water and water soil liberally. <b>Foliar Spray:</b> Mix 1-2oz per one gallon water and spray leaves liberally.	Apply once every 14 days Apply once weekly
2-3 year-old trees	Soil	Mix 4oz (or 8 Tablespoons) per one gallon water and water soil liberally. <b>Foliar Spray:</b> Mix 3oz per one gallon water and spray leaves liberally.	Apply once every 21-30 days Apply 1-2 times per week
Mature trees, small orchards	Soil	Mix 2 gallons with 30 gallons water, per each acre of land. Spray soil liberally, then water thoroughly. <b>Foliar spray:</b> Mix one quart per 20 gallons water and spray canopy liberally.	Apply every 30-60 days Apply once weekly
Transplanting young trees	Soil	Mix one quart with 10 gallons water. After placing tree in hole, pour mixture around root ball. Pack hole with desired soil or growing media.	One initial application. Then follow "2-3 year-old trees"
Orchard irrigation	Soil	Add 1 gallon per each 20 gallons water volume.	Once monthly, or as needed

**Storage:** For full product shelf life, store at 45-85°F. KEEP OUT of direct sunlight. DO NOT freeze.

**Safety:** The microorganisms used in this product are not likely to cause illness to healthy humans. Not recommended for human consumption. Personal protection equipment (PPE) may or may not be used by applicator. It is not necessary to remove pets or livestock when applying.

**OMRI Certification:** This product does not have OMRI certification. All USDA Certified, CDFA Certified and Oregon Tilth Certified Organic producers are encouraged to have the certifying officer contact our office for usage approval. The process is simple.

**Tank-Mixing Compatibility:** A stand-alone application is always preferred to avert a microbial integrity breach. However, if tank-mixing is required to avoid additional application costs, please refer to our "Tank-Mixing Compatibility" chart on our website.

*For a list of our dealers & locations, visit:*

[www.windrivermicrobes.com](http://www.windrivermicrobes.com)



P.O. Box 638 Ringling, OK 73456  
580-465-2849 (BUGZ)  
info@windrivermicrobes.com

Your local, authorized dealer is:

# BIO SOIL

*It's not magic...  
it's microbes!*




### What is it?

BIO SOIL is a naturally derived formulation of beneficial bacteria and fungi that strengthens the ecosystem in soils or other growing media supporting trees and woody plants.

### Is it necessary?

Absolutely! Without a balanced ecosystem, the growing environment is compromised, plant roots are less effective at nutrient absorption and cycling, and trees become more susceptible to pathogens, disease and pests.

### How does it work?

Woody plants can't directly consume most nutrition bound up in soil; they depend on microbes to process it for them, to make nutrients "bioavailable." Woody plants team with microbes to defend themselves against pests and pathogens such as blight, rusts, root rot, and harmful insects, to moderate pH and salinity and to improve water retention and soil aeration. Microbes are *essential* for optimum health and maximized growth.

### Will overspray from my fruit trees hurt my garden?

BIO SOIL is 100% safe to use on all trees and plants. It is naturally sourced from plants, soils and animals.

### Does it repel pests, like the pecan casebearer?

BIO SOIL contains bacteria that are unattractive to some insects; however, it is neither an insecticide, pesticide nor parasiticide. If applied prior to the moths emerging, it will help rid the casebearer larvae.

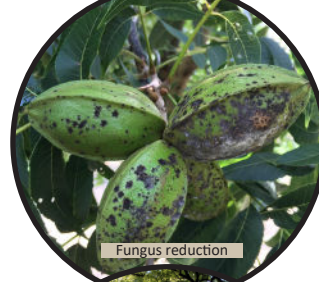
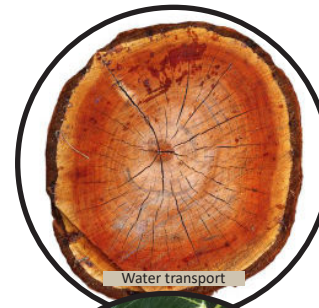
### Does it contain mycorrhizae?

Yes, both endomycorrhizae and ectomycorrhizae. These fungi are extremely important for sourcing, retrieving and delivering nutrients to roots.

### Is it certified for organic production?

BIO SOIL is not OMRI certified. However, the approval process for use only takes a phone call and an email. It's fast and simple.

# BIO SOIL



# Microbes...

### Functions

- » Facilitates water transport through both cambium layers
- » Promotes lignan growth
- » Balances soil ecosystem
- » Improves fertilizer efficiency
- » Helps balance pH
- » Reduces harmful pathogens
- » Increases aeration in compact soils
- » Reduces fungal infections
- » Inhibits mold and powdery mildew
- » Balances ratio of bacteria to fungi
- » Increases nutrient conversion and absorption
- » Unleashes aggregate-bound phosphorous
- » Improves nitrogen fixation
- » Sequesters carbon
- » Reduces salinity and breaks down heavy metals in soils
- » Improves soil organic matter
- » Reduces required inputs
- » Opens stomata for better transpiration and respiration

...and much more!

### Applications

- » Easy to administer through ANY type of water delivery, irrigation or spray applicator
- » May be aerosol sprayed
- » Cleans drip systems