

NitriBoost-HA

4-0-0

Organic Nitrogen fertilizer with 2% soluble Humic Acid
High Analysis and Finely Screened

Statement of Composition:

<i>Total Nitrogen</i>	4.0 %
0.24 % Ammoniacal Nitrogen	
0.36 % Water soluble organic Nitrogen	
3.4 % Water insoluble organic nitrogen	
Non Plant food ingredients	
2.0% Humic Acid from leonardite	

Derivation:

Poultry Feather meal and leonardite ore.

Net Weight: 8.97 Lbs./Gal. or 1.07 Kg./L

KEEP OUT OF REACH OF CHILDREN

CAUTION

This product is intended for

AGRICULTURAL USE ONLY

For handling and first aid precautions please see
Material Safety Data Sheet (MSDS).

STATE OF WASHINGTON

Information received by the Washington State Department of Agriculture regarding the components in this product is available on the internet at <http://agr.wa.gov>

This product has been registered with the Washington State Department of Agriculture Organic Food Program.

DIRECTIONS FOR USE

General Information: NitriBoost-HA™ is a concentrated dry powder fertilizer suspended in soluble liquid humic acid and is designed for dilution with water or liquid fertilizers and applied through liquid injection systems. NitriBoost-HA™ provides all growers with a safe and easy to use nitrogen fertilizer that is balanced with carbon for rapid release and utilization. This product complies with organic certification standards for use in conventional and certified organic growing.

Stability: NitriBoost-HA™ is stable over a broad range of storage conditions. However, this product contains a large amount of suspended solids. Prior to use or transfer thorough agitation is necessary.

Compatibilities: Do not introduce foreign materials (fertilizers) or water into NitriBoost-HA™, unless previous experience or a jar test indicates compatibility. Do not add microbes, from any source, to stored or suspended product, unless a soil application is eminent.

Handling: Follow appropriate general safety procedures. In case of accidental exposure, flush with plenty of water. Refer to Material Safety Data Sheet (MSDS) for additional information.

AFTER SUSPENSION: SHAKE, STIR OR AGITATE BEFORE USE. When handled in bulk quantities, storage in a cone bottomed tank is recommended to facilitate agitation. When stored in a cone bottomed tank, agitate 10 minutes prior to use. When stored in a flat-bottomed tank, agitate 20 minutes before use. When applying agitation is recommended continually. Mechanical (paddle) is superior to hydraulic agitation.

APPLYING NITRIBOOST-HA™

NitriBoost-HA™ is finely prepared suspension designed for multiple uses. NitriBoost-HA™ can be applied via seedline, siddress shank injection, drip chemigation, subsoil drip line chemigation, drenching, mixing in the transplant water, or a soil covering method.

General application guidelines: Use NitriBoost-HA™ in accordance with crop or soil Nitrogen demand. See the placement specific guidelines below for further placement efficiency. This product is of most benefit

to plants in advance of rapid growth and development.

Environmental factors: Warm soil conditions and microbial augmentation enhance fertilizer cycling and availability, while cooler conditions delay uptake. When timing applications care should be taken to apply in advance of peak plant demand or grand growth.

Note: Utilize soil and tissue testing to determine nutrient needs. Where warranted, adjust fertilizer rates to coincide with established crop demand.

General Rates For Application:

Broadcast rates for NitriBoost-HA™ can be reduced in field grown crops in the following ways: Shank injection, banded, in furrow sprays, soil covering methods, layby, drench, in the transplant water, or by drip chemigation. Means to calculate rates will be elaborated on below. **However, actual rates should be determined by crop demand, soil and tissue testing.**

Table 1.

Soil Application: Use a minimum of five gallons per acre and up-to a maximum of established crop demand through the most convenient and trouble-free application method. However, most application techniques will require dilution: As a suspension, use diluted/suspended NitriBoost-HA™ at a minimum rate of 10 parts water to 1 part NitriBoost-HA™. (Note: more water will ensure ease of application). Continual agitation is recommended. Injection to micro-irrigation or sprayer systems should introduce the product ahead of the filtration system. Note: Use entire mix, flush system with water after use.

General Guidelines Application:

Banding: For banded (shank injection, band drench or seedline dribble) applications; the treatment area actually is the area covered by the band, not the total cropland planted. To express broadcast rates as and amount per treated acre and banded applications are used, the amount of product used will be proportionately less. The following formula can be used to calculate the amount of NitriBoost-HA™ needed per acre of crop when banded applications are made:

$$\frac{\text{Band width in inches}}{\text{Row spacing in inches}} \times \text{Broadcast rate/Acre} = \text{Total amount needed per acre.}$$

Drenching Method: Apply NitriBoost-HA™ in sufficient water or fertilizer to move NitriBoost-HA™ off the soil surface and into the root zone, but not beyond. See band application calculations for instructions on calculating the amount of product to apply.

Soil Coverage Method: At planting apply the specified dosage to the soil around the seed and to the covering soil as it fills in the furrow. The product should be below the seed as much as possible, with the exception of potatoes where it should generally be above the seed piece. Please reference the banding application notes listed above concerning band application calculations.

MICRO SPRINKLER OR DRIP IRRIGATION SYSTEMS

(CAUTION: NitriBoost-HA™ is finely screened to 200 mesh to ensure trouble-free and safe applications through most brands of micro-irrigation systems. However, injection rates, dilution rates and previous experience will dictate the safety of this method of application. Please refer to your systems manufacture's guidelines or personal experience for appropriate screening size safety and injection methods. When in doubt inject NitriBoost-HA™ ahead of media filters or screens and with adequate dilution.)

Chemigation Application Guidelines: Broadcast rate should be dependent on the crop, depth of application, water holding capacity of the soil, and soil or tissue testing. For proper application:

1. Determine the area (length x width) to be treated, divide by the number of acres and multiply by the rate per the number of acres to be treated. This number is the total gallons of NitriBoost-HA™ needed to treat the field or irrigation block.

2. NitriBoost-HA™ can be safely metered into drip systems. Determine the amount of water needed to saturate the root zone (0.5" to 1.25" of water), divide this by the time needed to apply the necessary water. This number is the time required to make the application of NitriBoost-HA™.

3. Divide the number of gallons from Step 1 by the treatments time in Step 2. This number is the application rate of NitriBoost-HA™ per unit of time. Apply NitriBoost-HA™ at this treatment rate until desired application rate has been reached.

Drip Chemigation Calibration Instructions: During pre-irrigation check drip line for uniform distribution (See calibration information below) and repair if necessary. Once the system is calibrated add the amount of suspended NitriBoost-HA™ required for treatments as calculated above, to the middle third of the irrigation set. Follow these guidelines:

Step-by-Step Instructions

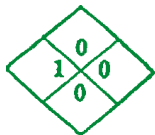
- Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters are putting out the same amount of water.
- Before starting to calibrate, operate the system until all emitters are putting out equal flow rates or until the system is operating at full pressure.
- Only pressure injection or venturi equipment is recommended.
- Determine the area to be treated in each irrigation run.
- For calibration, substitute a concentrated detergent or a soluble fertilizer in the injection tank. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur should be checked for both the closest and farthest emitters. If a soluble fertilizer is used, measure the time intervals with a salt bridge.
- If the period of detection of the indicator solution between the emitters are within two minutes of each other, comparable coverage will be obtained.
- Once the system is calibrated, dilute the needed amount of NitriBoost-HA™ with water using a minimum of 5 parts water/fertilizer solution to 1 part NitriBoost-HA™.
- Do not begin to inject NitriBoost-HA™ into the system until all emitters are producing equal flow rates, or until the system is at full pressure.
- Inject NitriBoost-HA™ into the system in the middle of the irrigation set of a 1/2 - 1 inch of irrigation water. With at least 1/4" of additional water to move product off of the surface.

Manufactured by:

Bio Scientific, Inc.

4405 S. Litchfield Rd., Avondale, AZ 85323

1-800-USA-BIO1



Net Contents _____ BULK _____ gal (_____ l)

Lot No. _____

Revision Date: 2/29/04

Version WA4

1 "NitriBoost-HA™ is the trademark of BioScientific, Inc.

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. Buyer assumes the risk of any use contrary to such directions. Seller makes no other warranty of representation of any kind, expressed or implied, concerning the product, including NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE. No such warranties shall be implied by law and no agent of the seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty. The exclusive remedy against seller shall be a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of warranty or tort. Any controversy of claim arising out of, or relating to this contract, or breach thereof, shall be settled by arbitration in accordance with the commercial arbitration rules of the American Arbitration Association, and judgement upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.