

# BIO-SYTE

## A Plant Hormone Supplement

**Active Ingredients:**

Cytokinin (as kinetin, based on bioassay) ..... 0.010%

Includes:

- 6-(4-hydroxy-3-methylbut-trans-2-enylamino)-purine
- N<sup>6</sup>-methylaminopurine,
- N<sup>6</sup>-dimethylaminopurine,
- N<sup>6</sup>-isopentenylaminopurine

Auxin:

Indole-3-butyric acid ..... 0.005%

Gibberellin:

Gibberellic Acid A<sub>3</sub> ..... 0.004%

**Other Ingredients:** ..... 99.981%

**TOTAL** ..... **100.000%**

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If Inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call poison control center or doctor for further treatment advice.</li> </ul>
<b>If on Skin or Clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call poison control center or doctor for treatment advice.</li> </ul>
<b>If in Eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call poison control center or doctor for treatment advice</li> </ul>
<p><b>Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information, call 1-800-858-7378 between 9:30 am and 7:30pm (eastern time).</b></p>	

**SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS**

EPA Reg. No. 90930-2-1842  
EPA Establishment No. 90930-PA-0001

**NET CONTENTS: ONE GALLON (3.78 Liters)**  
**9.5 lbs./4.3 kg**

MANUFACTURED FOR:  
Triangle C.C.  
117 Preston Court  
Macon, GA 31210



MANUFACTURED BY:  
Miller Chemical & Fertilizer, LLC  
P.O. Box 333, 120 Radio Road  
Hanover, PA 17331

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin clothing or eyes .

**PERSONAL PROTECTIVE EQUIPMENT**

**Applicators and other handlers must wear:**

- A. Long-sleeved shirt and long pants.
- B. Shoes plus socks
- C: Protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**User Safety Recommendations:**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Before using **BIO-SYTE**, read and follow the precautions appearing on the label above. See label insert for application instructions.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State/Tribal agency responsible for pesticide regulation.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instruction and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls over long-sleeved shirt and long pants.
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets out of the treated area until sprays have dried. Keep animals and unprotected persons out of operational areas during treatment.

### **Chemigation System**

Apply **BIO-SYTE** only through the following types of systems: sprinkler, including center pivot, lateral move, end tow, side roll, traveler, big gun, solid set, or hand move; or drip (trickle) irrigation systems. Do not apply his product through any other type of system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

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

### **Chemigation System Connected to Public Water Systems**

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 at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), back flow preventer 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.

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

The pesticide injection pipeline must 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.

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.

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. Do not apply when wind speed favors drift beyond the area intended for treatment.

Supply pesticide tank agitation, especially if product is to sit in tank for over 6 hours.

**BIO-SYTE** may be applied continuously for the duration of water application or with the first quarter to one-half of the watering period.

Mixing instructions: Fill supply tank to 1/4 full to 1/2 full. Add **BIO-SYTE** and complete filling.

### **Sprinkler or Drip (Trickle) Chemigation**

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

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

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch will stop the water pump when the water pressure decreases to the point where pesticide distribution is adversely affected.

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. Do not apply when wind speed favors drift beyond the area intended for treatment.

Supply pesticide tank agitation, especially if product is to sit in tank for over 6 hours.

**BIO-SYTE** may be applied continuously for the duration of water application or with the first quarter to one-half of the watering period.

Mixing instructions: Fill supply tank to 1/4 full to 1/2 full. Add **BIO-SYTE** and complete filling.

Use **BIO-SYTE** in combination with a well-balanced fertility program and good management practices. Miller Chemical & Fertilizer, LLC advises the use of soil and tissue testing, and additional nutrients and micronutrients as needed.

Refer to Label Insert for application instructions.

#### **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in locked storage area .

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

### **LIMITED WARRANTY**

MANUFACTURER warrants that this product (1) conforms to the ingredient statement on the label and (2) is reasonably fit for the purposes set forth in Directions for Use. EXCEPT AS WARRANTED. THE PRODUCT IS SOLD AS IS. MANUFACTURER MAKES NO OTHER WARRANTY EXPRESS OR IMPLIED.

The manufacturer's directions regarding uses of this product are based upon tests believed to be reliable. All statements made concerning this product apply only when used as directed, under normal use conditions. FOLLOW DIRECTIONS CAREFULLY. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the manufacturer. Buyer assumes all risks of use, storage or handling of this product to the extent allowable by State Law.

# **BIO-SYTE**

## **For Use as a Plant Hormone Supplement**

### **APPLICATION INSTRUCTIONS** **SHAKE WELL BEFORE USING**

Good growing conditions are necessary for the maximum benefits from utilization of **BIO-SYTE**. Use a well-balanced nutrient program for maximum gain from use of **BIO-SYTE**. **BIO-SYTE**, in any of its applications, is not intended to replace fertilizer or to supply nutrients that would normally be added in a conventional fertility program. Timing of the foliar spray application is very important. Always follow directions precisely. Do not apply within eight hours of forecast rain. For best results, apply **BIO-SYTE** in the early morning or late afternoon, especially when temperatures exceeds 95°F (36°C).

**TRANSPLANTS:** For a quick start, dip roots in a solution of 1 tablespoon **BIO-SYTE** per gallon of water prior to transplanting or drench flats with a solution of 1/2 oz. per gallon of water.

### **CROP USE GUIDELINES** **This product is cleared for use on any and all crops.**

For local use recommendations for major and minor crops,  
contact your PCA or local distributor representative.

For maximum benefit, all foliar applications must include Calcium EDTA or  
other highly available calcium source in the tank mix.

<b><u>CROP</u></b>	<b><u>OZ/ACRE</u></b> <b><u>(each application)</u></b>	<b><u>TIMING AND FREQUENCY</u></b>
Cotton	1-2 fl. oz.	Apply in seed furrow.
	2 fl. oz.	Spray in a band at 1 to 3 leaf stage.
	3-4 fl. oz.	Spray at pinhead or matchhead square.
	6-8 fl. oz.	Spray at early bloom and to late bloom.
Corn (field)	2 fl. oz.	Apply in seed furrow at planting.
	6 fl. oz.	Spray in a band at 5 to 7 leaf stage.
	6 fl. oz.	Repeat 2 weeks later.
Corn (sweet, popcorn)	2 fl. oz.	Apply in furrow prior to planting or with seed.
	6 fl. oz.	Spray in a band at 3 to 5 leaf stage (12" to 16").
	6 fl. oz.	Repeat 2 weeks later.
Rice	8 fl. oz.	Spray at 3 to 7 leaf stage.
	8 fl. oz.	Spray at panicle differentiation.
Sorghum (Milo)	2 fl. oz.	Apply in seed furrow at planting.
	4-6 fl. oz.	Banded spray at 5 to 7 leaf stage.
	4-6 fl. oz.	Apply at boot to early bloom.

## CROP USE GUIDELINES

<u>CROP</u>	<u>OZ/ACRE</u> <u>(each application)</u>	<u>TIMING AND FREQUENCY</u>
Soybeans	4 fl. oz.	Broadcast preplant incorporated with herbicide or 1-2 fl. oz./acre in furrow with seed.
	4 fl. oz.	Spray at third to fifth trifoliolate.
	6 fl. oz.	Spray at pod fill.
Sugar Beets	2 fl. oz.	Apply in seed furrow at planting
	4 fl. oz.	Banded spray at the 6 to 8 leaf stage.
	8 fl. oz.	30 days after first application.
Winter Wheat Barley, Rye		For winter grazing: Apply 8 fl. oz./acre two weeks after emergence. Make a second 4 to 8 fl. oz. application when spring growth begins after vernalization to increase grain production.
Spring Wheat Barley, Rye, Oats		Spray 8 fl. oz. when plants have to 3 to 5 true leaves emerged.
Forage crops- Legumes or Grasses	8-16 oz.	Treat seed with Arise Seeding Booster. Spray <b>BIO-SYTE</b> 4 to 6 weeks after emergence and monthly thereafter. Mature Crop; Spray <b>BIO-SYTE</b> as spring growth begins 1 week before harvest and again 2 weeks after cutting.
Seed production	8-16 oz.	On established crops: Spray <b>BIO-SYTE</b> at the beginning of inflorescence development (early tillering) and again 2 weeks later. Spray 8 to 16 oz/acre at the beginning of bloom.
Asparagus	12 oz.	Spray fern 2 weeks after last harvest.
	8 oz.	Spray monthly during fern growth.
Beans (Dry Beans, etc.)	3 fl. oz.	Spray banded at the third trifoliolate. Spray (broadcast) at first bloom.
Field Peas	3 fl. oz.	Spray banded at the third trifoliolate. Spray (broadcast) at first bloom.
Broccoli, Cabbage, Cauliflower, Celery, Brussel Sprouts	2 fl. oz.	Band 2 weeks after transplant.
	4 fl. oz.	Band 4 weeks after transplant. Repeat biweekly.
Canola	4 fl. oz.	Apply (broadcast) at 3 leaf stage.
	6-8 fl. oz.	Apply again (broadcast) two weeks later
Carrots, Beets, Other Root Crops	8-12 fl. oz.	Apply when seedlings have 3 to 6 leaves.
	4-8 fl. oz.	Follow at 2 to 4 week intervals.
Cucurbita: Watermelons, Canataloupe, Cucumbers, Muskmelons	2 fl. oz.	Banded at 2 to 4 leaf stage.
	4 fl. oz.	Banded when plants show first signs of running.
	6 fl. oz.	Broadcast two weeks after first application.
Grapes	4-8 oz.	General: Apply <b>BIO-SYTE</b> at 4 oz. with all foliar nutritional or pesticidal sprays. Sizing: Apply as tank mix with all GA sizing sprays.

Harvest: Apply **BIO-SYTE** with high potash fertilizer at 2 to 10 days before harvest to enhance sugar accumulation.

Onions, Garlic                      Make first applications at bulb initiation at 8 to 16 fl. oz./acre.  
Repeat at two week intervals for up to 4 applications.

**CROP USE GUIDELINES**

<b><u>CROP</u></b>	<b><u>OZ/ACRE</u></b> <b>(each application)</b>	<b><u>TIMING AND FREQUENCY</u></b>
Peas (Field, Chickpea, etc.)	3 fl. oz.	Spray banded at the third trifoliate. Spray (broadcast) at first bloom.
Peanuts	2 fl. oz. 6 fl. oz.	Two weeks after emergence, banded. Apply at bloom and at initial pegging.
Peppers: Bell, Chile, Cayenne, Jalapeno	2-4 fl. oz. 4-8 fl. oz.	Banded at the 3 to 5 leaf stage. Apply at 7 to 14 days intervals for 4 to 6 applications.
Potatoes	4 fl. oz. 6 fl. oz. 8 fl. oz.	Add to fertilizer and incorporate in seed furrow prior to planting. Banded at stolonization. Broadcast 2 to 4 weeks later.
Spinach, Lettuce and Other Leafy Vegetables	2-4 oz. 4- 8 oz.	Begin at the 3 leaf stage and apply weekly at 4 to 6 oz. thereafter.
Squash	3 fl. oz. 8 fl. oz. 8 fl. oz.	Band at 2 to 4 leaf stage. Broadcast at early bloom. Broadcast at 14-day intervals.
Sugarcane	16 oz.	Planting: In furrow over newly laid cane. Foliar: 1 <sup>st</sup> -At beginning of ratoon bud extension. 2 <sup>nd</sup> -At beginning of sugar accumulation. 3 <sup>rd</sup> -One to three weeks before harvest.
Sunflower	2 fl. oz. 6 fl. oz.	Two weeks after emergence, banded. Apply at bloom.
Strawberries	8 fl. oz. 8 fl. oz.	Broadcast 2 to 3 weeks prior to coming out of dormancy. Broadcast at early bloom and at 14-day intervals thereafter.
Tomatoes (processing)	2 fl. oz. 8 fl. oz.	Apply in a band (14") 1 week after transplant or at 6 to 8 leaf stage. Broadcast at early bloom and again 2 weeks later.
Tomatoes (fresh market)	2 fl. oz. 4 fl. oz. 8 fl. oz.	Apply in a band (14") 1 week after transplant or at 6 to 8 leaf stage. Band 3 weeks later. Broadcast with calcium or foliar fertilizer every 14 days.
Nut Crops- Almonds, Pecans, Pistachios, Filberts, Walnuts, Cashews	16- 32 oz.	Apply <b>BIO-SYTE</b> with 10 lb/acre low biuret urea at mid-nut fill and again one month later. Add 8 oz. of <b>BIO-SYTE</b> per acre to each zinc or calcium spray.

Apply 16 to 32 oz/acre prior to flowering.  
Ask your local PCA for specific regional timing.

**All Fruits: Apple, Cherry, Citrus (Orange, Lemon, etc.) Banana, Stonefruits (Peach, Plum, etc.), Pear, Mango, Papaya, Pineapple**

**Transplants:** Follow general transplant instructions.

**Fruit Trees in Production:** Spray fruit trees with a solution of 1 oz. **BIO-SYTE** in 4 gallons water (or 1 to 2 pint/acre) at the following growth stages:

1. At bud break to increase pollination efficiency. (**BIO-SYTE** will not harm bees or pollinating insects);
2. At 1 week after petal fall to promote cell division;
3. At 1 to 2 weeks before fruit drop to reduce physiological stress and reduce fruit drop;
4. At 20 to 30 days after petal fall to increase fruit size;
5. Monthly during fruit growth and development to promote nutrient translocation to product larger and better quality fruit.

**Non-Bearing use for Trees, Fruits, Nuts, Berries, Shrubs and Woody Ornamentals:**

To aid in propagation of trees, fruits, berries, soft wood cuttings, shrubs and woody ornamentals and to reduce transplant shock, to promote growth and vigor and reduce stress in non-bearing fruit trees such as apple, peach; berry and vine crops such as cranberries; evergreen trees such as spruce, fir, pine; deciduous trees such as birch, elm, maple; flowering plants and shrubs such as poinsettia, rose, azalea, rhododendron, crepe myrtle; and for other flowering an non-flowering shrubs.

**New Cuttings:** Spray **BIO-SYTE** at 1 to 2 pint per acre on the stems, branches, vines or canes to be propagated from 1 to 7 days before cutting. After planting, spray **BIO-SYTE** at 1/2 pint to 1 pint or apply through the irrigation system at weekly intervals until the plants are established.

**Replant Areas:** Spray the plants before cutting. Then spray **BIO-SYTE** weekly at 1/2 to 1 ounce per 1500 square feet and irrigate in. Continue weekly to biweekly applications until the plants are established.

**Established Trees and Shrubs:** Spray 1 to 2 pints per acre, or a mixture of 1 oz. **BIO-SYTE** to 4 gallons water to thoroughly wet the foliage at any or all of the following growth stages.

1. Early spring to promote bud initiation;
2. At bud break;
3. At terminal calyx;
4. Early to mid-fall.

**For best results apply BIO-SYTE with foliar nutrients, micronutrients, or secondary nutrient sprays such as calcium, iron, and zinc.**

## **TURF**

**Spring Application:** Make an early application of 1/2 to 1 fl. oz. **BIO-SYTE** per 1000 sq. ft. to promote tiller, rhizome, or stolon growth, to develop a deep root system, and to give the turf a rapid start once winter dormance is broken and growth begins. Continue monthly 1/2 fl. oz./1000 sq. ft. applications throughout the spring and summer. Spring application is important to develop a deep root system which will condition the turf and reduce the stress of disease and summer heat or low rainfall. Apply **BIO-SYTE** with iron sulfate for maximum root growth response.

**Fall Application:** Two to three applications of **BIO-SYTE** (1/2 to 1 fl. oz. per 1000 sq. ft.) made in the fall beginning about eight weeks before the turf becomes dormant (eight weeks before the frost date in the northern states) to promote root growth and provide the grass with the vigor to better endure the stress of winter (reduce winter kill) and improve survival of a good healthy turf for the following spring.

**Golf Greens, Fairways, Football and Soccer Fields, and Baseball Infields and Outfields:** At the beginning of spring growth apply 1 to 2 fl. oz. per 1000 sq. ft. at the breaking of dormancy. Make successive maintenance applications of 1/2 to 1 fl. oz. per 1000 sq. ft. at monthly intervals or as needed to maintain root growth, tillering, appearance and vigor throughout the growing season. During periods of intensive use apply 1/2 to 1 fl. oz. per 1000 sq. ft. weekly to the greens, infield or playing field to maintain root structure and renew growth and vigor between games. Make three applications of 1/2 fl. oz. per 1000 sq. ft. at 2 week intervals in the fall beginning about eight (8) weeks before turf becomes dormant to promote root growth and increase winter stamina to reduce winter kill.

**Sod:** Spray **BIO-SYTE** to newly laid sod at 1/2 to 1 fl. oz per 1000 sq. ft. to promote rooting and increase the rate of sod establishment. Maintain growth and vigor with monthly applications of 1/2 to 1 fl. oz. per 1000 sq. ft.

**Sod Farming:** Spray **BIO-SYTE** at 1/2 to 1 pint/acre monthly to sod fields to promote root, tiller and rhizome growth and to bring the crop to harvest more quickly. Maintain accelerated growth with **BIO-SYTE** applications of 1/2 to 1 pint/acre at 2 to 4 week intervals or as needed. Spray **BIO-SYTE** at 1/2 to 1 pint/acre to sod 1 to 4 days before harvesting to initiate new root growth and speed up establishment when sod is laid.

**Lawns, Playgrounds, Parks, Recreational Areas, Landscaped Roadways and Cemeteries:** Apply 1 fl. oz. per 1000 sq. ft. at the beginning of spring growth to promote a deep root system and tillering to fill sparse areas. Apply at 1/2 to 1 fl. oz. per 1000 sq. ft. monthly to maintain health and vigor of the turf. Application can be made more frequently as needed to condition the turf for stress or for periods of heavy use.

**Nutritional Sprays:** For better color response from nitrogen, iron, sulfur, zinc and other nutrient sprays use 1/2 to 1 pint/acre of **BIO-SYTE** with nutrient spray solution. For greens or smaller area, add 1/2 to 1 fl. oz. **BIO-SYTE** per 3 to 5 gallons spray solution.

#### **NURSERY AND GREENHOUSE USE**

To promote bud differentiation, cell division, root induction and growth and to reduce apical dominance. Use **BIO-SYTE** in your watering program or as a foliar spray.

**Propagation of Cuttings:** Dip cuttings in rooting hormone powder or solution and stick in rooting medium. Spray or mist cuttings with a solution of 1 fl. oz. **BIO-SYTE** to 4 gallons water (1 qt/100 gallons) at weekly intervals until root buds initiate. Then spray at 2 to 4 week intervals.

**Transplanting:** Add 1 fl. oz. **BIO-SYTE** per 4 gallons of transplant solution (fertilizer-water).

Drench the root zone. Follow with spray to foliage or add through irrigation system at 2 to 4 week intervals at the rate of 1 quart per 100 gallons.

**Production:** To increase growth rate, improve quality and resilience of nursery and greenhouse crops, add 1 fl. oz. per 4 gallons (1 quart/100 gallons) of fertilizer or water solution and apply through the irrigation system or via foliar spray.

#### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets out of the treated area until sprays have dried. Keep animals and unprotected persons out of operational areas during treatment. To promote rapid uptake and correction of nutrient deficiencies in ornamentals and turf, add **BIO-SYTE** to iron, nitrogen, fertilizers, zinc or other nutrient solutions at the rate of 1 fl. oz per 4 gallons (1 quart/128 gallons). Apply as a foliar spray or soil drench.

#### **LANDSCAPE MANAGEMENT (See Turf Uses also)**

**Bedding Plants:** Spray bedding plants at 2 to 4 week intervals with a solution of 1 fl. oz. **BIO-SYTE** per 4 gallons of water (1 quart/128 gallons), fungicide or nutrient spray to promote growth, flowering and maximum color development.

**Lawn Care:** Spray **BIO-SYTE** to lawns at the rate of 1/2 fl. oz. per 1000 sq. ft. **BIO-SYTE** can be added to liquid fertilizer, insecticide, fungicide, or herbicide sprays.

**Transplanting of Trees, Shrubs, or Bedding Plants:** See transplanting instructions under Nursery Use.

**Maintenance:** To promote growth and reduce stress from drought, disease or nutrient deficiency. Spray **BIO-SYTE** to foliage at the rate of 1 fl. oz. per 4 gallons of water or fertilizer or pesticide solution (1 quart/ 128 gallons).

**Nutritional Deficiencies:** To promote rapid uptake and correction of nutrient deficiencies in ornamentals and turf, add **BIO-SYTE** to iron, nitrogen, fertilizer, zinc or other nutrient spray solutions at the rate of 1 fl. oz. per 4 gallons (1 qt./128 gallons). Apply as a foliar spray or soil drench.

**Root Feeding:** Mix **BIO-SYTE** with root feeding solutions at the rate of 1 fl. oz. per 4 gallons of nutrient solution (1 quart per 128 gallons).

## SEED TREATMENT

As a seed treatment for seeds prior to planting **BIO-SYTE** may be applied to seed up to 6 months prior to planting. Dilute the recommended rate with a sufficient amount of water for uniform coverage. Mix thoroughly to coat seed and allow to dry before planting. **BIO-SYTE** can be applied with fungicide treatment or to fungicide-treated seed. Do not use treated seed for food, feed, or oil purposes. Commercial seed processors must apply with sufficient EPA-approved dye to assure adequate seed coloring. Commercially-treated seed must be labeled in accordance with the Federal Seed Act. For seed treated at planting, treat only those seeds needed for immediate use and planting. Do not store excess treated seed beyond planting time. Dispose of excess treated seed by burial away from streams and bodies of water.

<u>Crop</u>	<u>Recommended Rate</u>	
	<u>Ounces/10 lbs.</u>	<u>ml/kg</u>
Cotton, Peanuts	0.5 to 1.5	3.0 to 10.0
Wheat, soybeans, beans, peas	0.1 to 0.15 (1.0 to 1.5/ 100lbs.)	0.6 to 0.9
Corn, rice, grain sorghum	0.1 to 0.15 (1.0 to 1.5/ 100lbs.)	0.6 to 0.9
Potato seed pieces	1/400 dip for 1 minute	
Sweet corn, popcorn	1.0 to 2.0	6.0 to 12.0
Alfalfa, clover	0.75 to 1.5	5.0 to 10.0
Chiles, peppers, tomatoes,	1.5 to 3.0	10.0 to 20.0
Cucumbers, melons, cantaloupes,		
Honeydews, muskmelons, watermelons,	0.5 to 1.0	3.0 to 6.0
Squash (all varieties)		
Carrot, lettuce, cabbage, broccoli	2.5 to 5.0	15.0 to 30.0
Okra, onion, garlic, spinach	1.0 to 3.0	6.0 to 18.0
Turf grasses	1.5 to 2.5	10.0 to 15.0