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(Revisions required from previous submission are highlighted on page 3)

# cytogro®

#### Hormone Biostimulant for Ornamental Turf, Nursery and Landscape Management

A HORMONE BIOSTIMULANT TO PROMOTE ROOT GROWTH, ESTABLISHMENT, DEVELOPMENT AND GROWTH OF CUTTINGS, TURF, NURSERY AND LANDSCAPE CROPS.

#### Active Ingredients

Cytokinins, as kinetin based on bioassay	0.005
Inert Ingredients	99.9 <b>9</b> 5
Total	100.000%

#### KEEP OUT OF REACH OF CHILDREN CAUTION

Harmful if swallowed or absorbed through the skin! Causes skin irritation! Do not breath vapor or spray mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling.

#### Statement of Practical Treatment

If swallowed: call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If on skin: Wash skin with soap and water

If in eyes: Flush with plenty of water. Get medical attention if irritation persists. SEE SIDE PANEL FOR PRECAUTIONARY STATEMENTS.

CytoGro Hormone Biostimulant contains aqueous extract of seaweed meal, a source of cytokinin extracted from seaplants which promote root growth, increase tiller rhizome and stolon production and provide vigor and stress tolerance to ornamental turf, lawn landscape and nursery plantings. CytoGro contains hormone cofactors such as amino acids, vitamins, proteins, carboxylic acids, mannates and sea minerals derived from aqueous extracts of sea plants.

Net contents: 1 gallon/3.78 liters 9 lbs./4 kg. Lot No.

EPA Registation # 58199-3 EPA Establishment # 3837-MO-1 Distributed by Plant BioTech, Inc. Corrales, NM 87048

<sup>F</sup> CytoGro is a registered trademark of P.B.T, Inc.

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#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS Personal Protective Equipment

Applicators and other handlers must wear long-sleeved shirt and long pants and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment. If no such instructions for washables, use detergent and hot water. Keep and wash personal protective equipment 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 personal protective equipment 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:**

Do not contaminate water when disposing of equipment wash water.

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Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean highwater mark.

#### DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Before using CytoGro, read and follow the precautions appearing on the label.

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 agency responsible for pesticide regulation.

#### Chemigation system

Apply CytoGro 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 this product through any other type of system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform 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 application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable about the chemigation systems and

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responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

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, reducedpressure 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 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 system must contain a 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 which will stop the water pump motor 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.

CytoGro 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 to 1/2 full. Add CytoGro and complete filling.

#### STORAGE AND DISPOSAL

STORAGE: Store in a cool place and out of direct sunlight. Keep from freezing. Do not contaminate water, food, or feed by storage or disposal.

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

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

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#### AGRICULTURAL USE REQUIREMENTS

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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 instructions 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 12 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, waterproof gloves and shoes plus socks.

#### NON-AGRICULTURAL USE REQUIREMENTS

Some uses of this product 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. However, the Company strongly recommends that all users read and follow the Agricultural Use Requirements (see above) for the protection of all workers and handlers of agricultural pesticides.

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#### CYTOGRO Hormone Biostimulant for Turf, Nursery and Landscape Crop Management

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#### DIRECTIONS FOR USE

Do not apply to crops which will be used for food or feed purposes. It is a violation of federal law to use this product in a manner inconsistent with its labeling. Before using CytoGro Hormone Biostimulant for Turf, Nursery and Landscape Management, read and following the precautions appearing on the label. For best results CytoGro Hormone Biostimulant for Turf, Nursery and Landscape Crop Management should be applied in the early morning or late afternoon. Follow the specific rate uses below. Apply with sufficient water to get thorough foliage coverage. CytoGro Hormone Biostimulant for Turf, Nursery and Landscape Crop Management can be applied as mixture with most fungicides, herbicides, insecticides or liquid fertilizer. For maximum root growth response when used on turf or sod, add iron sulfate to CytoGro spray solution.

#### TURF

<u>Spring application</u>: Make an early application of 1 to 2 fl. oz. CytoGro per 2500 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 dormancy is broken and growth begins. Continue monthly applications throughout spring and summer. Spring application is important to provide a deep root system which will condition the turf and reduce the stress of disease and summer heat or low rainfall.

<u>Fall Application</u>: Two to three applications of CytoGro (1 to 2 fl. oz. per 2500 sq. ft.) should be made in the fall beginning about eight weeks before the turf becomes dormant (eight weeks before first 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.

<u>Golf Greens, Fairways, Football and Soccer Fields, and Baseball Infields and Outfields</u>: At the beginning of spring growth apply I to 2 fl. oz. per 2500 square feet at the breaking of dormancy. Make successive maintenance applications of 1/2 to 1 fl. oz. per 2500 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 2500 sq. feet 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 2500 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 CytoGro to newly faid sod at 1 to 2 fl. oz. per 2500 sq. ft. to promote rooting and increase the rate of sod establishment. Maintain growth and vigor with monthly applications of  $\frac{1}{2}$  to 1 fl. oz. per 2500 square feet.

Sod\_Farming: Spray CytoGro at 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 CytoGro applications of 1/2 to 1 pint/acre at 2 to 4 week intervals or as needed. Spray CytoGro at ½ to 1 pints per acre to sod 1 to 4 days before harvesting to initiate new root growth and speed up establishment when sod is laid.

Eawns, Playgrounds, Parks, Pecreational Areas, Landscaped Roadways and Cemeteries - Apply 2 If oz. per 2500 sphare feet at the beginning of spring growth to promote a deep root system and

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tillering to fill sparse areas. Apply at 1/2 to 1 fl. oz. per 2500 square feet 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.

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Nutritional sprays: For better color response from nitrogen, phosphorous, potash, iron, sulfur, zinc and other nutrient sprays use 1/2 pt CytoGro per acre with nutrient spray solution. For greens or smaller area, add 1/2 to 1 fl. oz. CytoGro per 3 to 5 gallons spray solution.

RATE CHART		
Fl. Oz./2500 Sq. Ft.	<u>Fl. Oz./1000 Sq. Ft</u> .	Pints/Acre
1/2 fl. oz	0.2 fl. oz.	1/2 pint
1 fl. oz.	0.4 fl. oz.	1 pint
2 fl. oz.	0.8 fl. oz.	2 pints

NURSERY AND GREENHOUSE USE: To promote bud differentiation, cell division, root induction and growth and to reduce apical dominance. Use CytoGro in your watering program or as a foliar spray, with plant nutrients.

<u>Propagation of Cuttings</u>: Dip cuttings in appropriate commercial hormone powder or rooting solution (such as Rootone or Hormex) and stick in rooting medium. Spray or mist cuttings with a solution of 1 fl. oz. CytoGro to 3 gallons water (1 qt./100 gallons) at weekly to 2 week interval until root buds initiate. Then spray at 2 to 4 week intervals.

<u>Transplanting</u>: Add 1 fl. oz. CytoGro per 3 gallons of transplant solution (fertilizer-water). Drench the root zone. Follow with spray to foliage or add through irritation 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. CytoGro per 3 gallons (1 quart/100 gallons) of fertilizer or water solution and apply through the irrigation system or via foliar spray.

Nutritional Deficiencies: To promote rapid uptake and correction of nutrient deficiencies in ornamentals and turf, add CytoGro to Iron, nitrogen phosphate or potash fertilizers, zinc or other nutrient solutions at the rate of 1 fl. oz. per 3 gallons (1 qt/100 gallons). Apply as a foliar spray or soil drench.

#### LANDSCAPE MANAGEMENT (see Turf uses also)

Bedding <u>Plants</u>: Spray bedding plants at 2 to 4 week intervals with a solution of 1 fl. oz. CytoGroper three gallons water, fungicide or nutrient spray to promote growth, flowering and maximum color development.

Lawn Care: Spray CytoGro to lawns at the rate of 1 fl. oz. per 2500 sq. ft. CytoGro can be added to liquid fertilizer, insecticide, fungicide, insecticide or herbicide sprays.

Transplanting of trees, shrubs or bedding plants: See transplanting instructions under nursery use.

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<u>Maintenance</u>: To promote growth and reduce stress from drought, disease or nutrient deficiency. Spray CytoCiro to foliage at the rate of 1-fl. oz. per 3 gallons of water or fertilizer solution (1 quart per 100 gallons).

<u>Nutritional Deficiencies</u>: To promote rapid uptake and correction of nutrient deficiencies in ornamentals and turf, add CytoGro to Iron Sulfate, nitrogen, phosphate, or potash fertilizers, zinc or other nutrient solutions at the rate of 1 fl. oz. per 3 gallons (1 qt/100 gallons). Apply as a foliar spray or soil drench.

<u>Root Feeding</u>: Mix CytoGro with root feeding solutions at the rate of 1 fl. oz. per three gallons of nutrient solution.

USE CYTOGRO IN COMBINATION WITH A WELL-BALANCED FERTILITY PROGRAM AND GOOD MANAGEMENT PRACTICES. THE COMPANY RECOMMENDS THE USE OF SOIL AND TISSUE TESTING, AND ADDITIONAL NUTRIENTS AND MICRO NUTRIENTS AS NEEDED.

SHAKE WE'L BEFORE USING.

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