LIC ENVIRONMENTAL PROTECTION AGENCY	EPA REGISTRATION NO.	DATE OF ISSUANCE		
US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS	∪307 <i>3−</i> 1	061 - 3 1990		
REGISTRATION DIVISION (TS-767) WASHINGTON, DC 20460	TERM OF ISSUANCE			
NOTICE OF DESTICIOE. FREGISTRATION	NAME OF PESTICIDE PRODUCT	. = -		
NOTICE OF PESTICIDE: REGISTRATION	PGR-IV			
(Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)				
NAME AND ADDRESS OF RI GISTRANT (Include ZIP code)				
-	٦			
Plant Growth Formulators, Inc.				
Р.О. вох 2307				
Gainsville, GA 30503				
L	_			
NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.				
On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.				
A copy of the labeling accepted in connection with this Regi	stration/Reregistration is returne	ed herewith,		
Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.				
Inis product is conditionally registered in accordance with FIFRA				
1. Samult/Cite all lata required for redistration/reregistration : out product under Firsh section 3(c)(b) when the Agency requires are redistrants of simular products to submit such data.				
2. Submit production information (pounds or gallons produced) for this product for the fiscal year in which the uses on cotton, milo, soy-peans, winter wheat, winter oats, winter barley, winter rye, peanuts, rice, peppers, beans, cappage, broccoli, cauliflower, brussels sprouts, onions, lettuce, spinach, turnips, mustard greens, sweet corn, tomatoes, potatoes, sugar beets, sugarcane, cantaloupes, watermelon, honeydew meions, young citrus, and strawberries are conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1 and ends September 30. Production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.				
ATTACHMENT IS APPLICABLE				
SIGNATURE OF APPROVING OFFICIAL		DATE		

This information should be submitted to:

Program Coordination Staff Registration Division (H7505C) Environmental Protection Agency Washington, DC 20460

- 3. Add the phrase "EPA Registration No. 63079-1" to the label before you release the product for shipment.
- 4. Subsit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Robert J. Taylor Product Manager (25) Fungicide-Herbicide Branch Registration Division (H7505C)

Enclosures

PGR-IV CONCENTRATE

ACTIVE INGREDIENTS

**Indolebutyric acid	l	0.001%
**Gibberellic acid		0.001%
Inert Ingredients		99.998%
	TOTAL	100.000

GUARANTEED ANALYSIS *MICRONUTRIENTS

Total Magnesium as Mg	0.500%
Water Soluble Magnesium as MG	0.500%
Copper (Cu)	0.050%
Zinc (Zn)	0.050%
Iron (Fe)	0.100%
Boron (B)	0.020%
Molybdenum (mo)	0.0005%
Cobalt (Co)	0.0005%

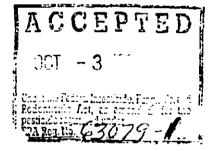
^{*}Sources of micronutrients
Chelating agent E.D.T.A.

*Magnesium Sulfate, Cupric Sulfate,
Zinc Sulfate, Ferrous Sulfate, Boron
Cxide, Sodium Molybdate, Cobalt Sulfate

KEEP OUT OF REACH OF CHILDREN CAUTION

See additional precautionary statements elsewhere on label CONTENTS: 1 GALLON (3.785 liters) 8.4 lbs. Net

PLANT GROWTH FORMULATIONS INC. P.O. BOX 2307 GAINESVILLE, GEORGIA 30503





^{**}Hormone like compounds in a nutrient solution to stimulate plant growth.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution: Harmful if inhaled. Avoid breathing vapor or spray mist. Remove contaminated clothing and wash before reuse. Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Drink promptly large quantities of milk, egg whites, gelatin solutions, or if these are not available, drink large quantities of water.

If Inhaled: Must be determined on an individual basis depending on site of use. Remove victim to fresh air.

If On Skin: Wash with plenty of soap and water. Get medical attention if abnormal reaction occurs.

If In Eyes: Flush with plenty of water. Call a physician if irritation persists.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands. Do not contaminate water when disposing of equipment washwaters.

PHYSICAL OR CHEMICAL HAZARDS Protect from freezing. Store out of direct sunlight.

STORAGE AND DISPOSAL

Pesticide Disposal: Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: For one gallon plastic; Triple rinse (or equivalent). Then offer for recycling or puncture and dispose in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. For containers less than one gallon; Wrap in newspaper effer emptying, and dispose in household trash.

CHEMIGATION

Refer to supplemental labeling for use directions for chemigation. Do not apply this product through any irrigation system unless the chemigation directions are specifically followed.

DIRECTIONS FOR APPLICATION

PGR-IV is to be mixed in a volume of water. Provide even and equal distribution by commonly used spray equipment. (Check with your product representative).

For optimum results, PGR-IV should be applied during the cooler part of the day - preferably early evening. DO NOT APPLY WHEN PLANTS ARE UNDER STRESS.

PLEASE NOTE: It is highly recommended to use foliar fertilizer in conjunction with PGR-IV since increased fruit set and yield are to be expected.

Please take steps to make certain that the plant has the available nutrition to produce mature and fully developed fruit.

FIELD CROPS

COTTON CROP INFORMATION

PGR-IV under university research studies (5 years) and on the farm use (6 years) level has produced cost effective results when applied under various cultural programs. The versatility of PGR-IV on cotton production provides the farmer several use options that may be implemented into his cotton crop growing program. Cotton farmers refer to the options as follows:

COTTON:

OPTION A - Step 1 - Apply 4 oz./Ac. at pinhead*

Step 2 - Boost with 4 oz./Ac. at early bloom (3 to 6 blooms/25 ft. of row).

OPTION B - Step 1 - Apply 1 oz./Ac. in seed furrow.

Step 2 - Broadcast 3 oz./Ac. at pinhead or matchhead

Step 3 - Broadcast 3 oz./Ac. at early bloom (3 to 6 blooms/25 ft. of row).

OPTION C - DRY LAND PROGRAM

1st APPLICATION: 1 oz. PGR-IV/Acre - 10" to 12"

band at cotyledon (1st 2 leaf)

2nd APPLICATION: 1 oz. PGR-IV/Acre - 10 to 12

band at 4 to 7 leaf stage (preferably 5 to 6 leaf)

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band at pinhead (we recommend that nozzles be set to assure

good coverage of plant)

4th APPLICATION: Broadcast 2 to 3 oz. I'Gk-IV/Acre at early bloom.

Optimum results are often obtained when PGR-IV is used in combination with your foliar fertilizer.

**Cotton being a continuous fruiting plant may be benefited by the multiple applications.

(boosting) program. Users of the multiple application program report better 1) retention of fruit; 2) increase boll size; 3) earlier maturity.

CORN: FIELD

OPTION A - Broadcast & oz./Ac. preemergence (can be mixed

with your herbicide).

OPTION B - STEP 1 - Apply 2 oz./Ac. in seed furrow at planting STEP 2 - Band (16°) 4 oz./Ac. (set nozzles to assure even distribution at 5 to 8 leaf stage

MILO:

OPTION A - Broadcast & oz./Ac. at 4 to 5 leaf stage.

OPTION B - STEP 1 - Apply 2 oz./Ac. in seed furrow at planting STEP 2 - Band (16") 3 to 4 oz./Ac. (set nozzles to assure even coverage) at 5 to 7 leaf stage.

SOTBEANS:

Split Application:

STEP 1 - Apply 4 oz./Ac. broadcast preplant incorporated with herbicide.

STEP 2 - Apply second application 4 oz./Ac. at early bloom.

WINTER WHEAT, OATS, BARLEY, RYE:

Use options:

If wheat is to be winter grazed: Apply 8 oz./Ac. within two weeks posternergence.

If not grazed:

STEP 1 - Apply 4 oz./Ac. within two weeks post emergence.

STEP 2 - Boost with 4 oz./Ac. at early tillering.

PEANUTS:

OPTION A - Apply 6 oz./Ac. at initial pegging.

RICE:

Apply 8 oz./Ac. at 5 leaf stage.



VEGETABLE CROPS

***PEPPERS: BELL, JALAPENO, SERRANO, etc.

STEP 1 - Band 2 oz./Ac. 2 weeks post transplant.

STEP 2 - Broadcast 2 oz./Ac. at early bloom.

STEP 3 - Broadcast 1 to 2 oz./Ac. at 21 day intervals.

BEANS: GREEN, LIMA, PINTO, BLACKEYE, MUNG, ETC. Spray 6 oz./Ac. at first bloom (broadcast).

***CABBAGE/BROCCOLI/CAULIFLOWER/BRUSSEL SPROUTS

STEP 1 - Band (14") 1 to 2 oz./Ac, 2 weeks post transplant.

STEP 2 - Boost (14" band) I to 2 oz./Ac. 4 weeks post transplant.

CUCUMBERS/SQUASH

STEP 1 - Spray 3 oz./Ac. at 2 to 4 leaf stage - broadcast.

STEP 2 - Boost with 3 oz./Ac. at early bloom - broadcast.

STEP 3 - Boost again with 2 oz./Ac. at 14 to 21 day intervals - broadcast.

DRY AND GREEN ONIONS

Prior to use on onions, check with your local product representative as to onion variety (onions are very sensitive and use levels vary with the variety).

LETTUCE/SPINACH/TURNIP/MUSTARD GREENS

Spray 2 oz./Ac. in furrow - OR - in 14° band over the top at the three leaf stage.

Spinach and greens - boost with 2 oz./Ac. after each cutting.

SWEET CORN

Two programs have produced good results:

& oz./Ac. in combination with herbicide - preemergence OR

STEP 1 - 2 oz./Ac. in furrow at planting.

STEP 2 - 4 oz./Ac. band at 5 to 7 leaf stage (12° to 16°).

***TOMATOES: Machine Harvested

STEP ! - Spray 2 oz./Ac. (14 band) 3 weeks post transplant.

STEP 2 - Spray 6 oz./Ac. (broadcast) at early bloom.

***TOMATOES: Hand Picked

STEP 1 - Spray 2 oz./Ac. (14" band) 3 weeks post transplant.

STEP 2 - Broadcast 2 oz./Ac. 3 weeks later.

STEP 3 - Broadcast i oz./Ac. in combination with foliar fertilizer every 21 days.

POTATOES - RUSSET

OPTION 1 - Add 4 oz. PGR-IV/Ac. to your fertilizer and incorporate prior to planting.

OPTION 2 - 6 oz./Ac. broadcast at very first sign of blocm.

SUGAR BEETS: As an aid to increase total sugar content 1st APPLICATION: 2 oz./PGR-IV/Ac. Broadcast 6 to 8 leaf stage. 2nd APPLICATION: 30 days later - 2 oz. PGR-IV/Ac. Broadcast.

SUGAR CANE: As an aid to increase total sugar content APPLICATION: Side Dress & oz. PGR-IV/Ac. in combination with your fertilizer.

FRUIT CPOPS

CANTALOUPES/WATERMELON/HONEYDEW

STEP 1 - Spray 3 oz./Ac. broadcast when plants show first signs

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of running.

STEP 2 - Boost 3 oz./Ac. broadcast 2 weeks later.

YOUNG CITRUS

STEP 1 - To reduce transplant shock and get seedlings off to a faster start - use at the rate of 1 oz. PGR-IV/2 gallons of water - dip root or spray ball prior to set - then - spray foliage lightly.

STEP 2 - Using transplant solution - 1 oz. PGR-IV/2 gallons water - spray foliage of young trees to drip or run-off 2 to 3 times per year.

***STRAWBERRIES

STEP 1 - Spray 3 oz./Ac. 3 to 4 weeks prior to coming out of dormancy - broadcast.

STEP 2 - Spray 3 oz./Ac. at early bloom. Broadcast.

***TRANSPLANTS - for quick start - dip or spray roots with solution of 1 Tablespoon of PGR-IV per gallon of water prior to transplanting.

SHAKE WELL BEFORE USING

(NGN-CROP)

GOLF GREENS:

Initial treatment to promote root development and protect against "winter Kill":

2 oz. PGR-IV/5,000 - 7,000 sq. ft.

Thereafter use 1 oz. of PGR-IV/green every 30 days.

TEES.

Use 1/2 oz. PGR-IV/1,200 - 1,500 of tee area every 30 days to maintain a healthy and mass root growth.

FAIRWAYS:

To establish the necessary root growth to fully utilize applied fertilizer - use 8 oz. PGR-IV/Acre two times the first year - thereafter - use 8 oz. PGR-IV/Acre one to two times a year.

PGR-IV USE ON TRANSPLANTS, ORNAMENTALS, AND YOUNG TREES FOR FAST HEALTHY START.

PGR-IV STOCK SOLUTION - use 1 oz. PGR-IV/two gailons water and use as follows:

At time of transplanting - 1) Bare (naked) roots - dip or

spray with stock solution.

Balled plants - spray ball at time of transplant.

Mist (not run off) foliage lightly at time of transplant.

YOUNG TREES AND ORNAMENTALS

SHRUBS - (established) - for increased vigor, rapid growth and healthy plant appearance:

Spray foliage with transplant solution (1 oz. PGR-IV/2 gallons of water) to point of run-off - two to three times per year.

FLOWERING PLANTS - (roses, azaleas, etc.)

3-4 year old - using stock solution - take 4 oz. stock solution in 1 gallon of water and water in around root zone - one time per year - time of treatment - preferably early spring.

COD

To improve growth, heavy rooting - Broadcast & oz. PGR-IV/Acre.

i-Speed up regrowth after harvest - Broadcast 4 oz. PGR-IV/Acre.

2-Boost with another 4 oz. PGR-IV/Acre broadcast six weeks later.

TURF

For quick "tie down" after laying and to get turf off to a quick start use PGR-IV as follows:

1-Broadcast 2 oz. PGR-IV/5,000 sq. ft. and water in.

2-Second application - 30 days later - 2 oz. PGR-IV/5,000° and water in.

NOTICE: PGR-IV IS NOT A FERTILIZER. USE IN COMBINATION WITH A GOOD FERTILIZER PROGRAM WHERE INDICATED.

CHEMIGATION FOR PGR IV

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Apply this product only through sprinkler including center proof, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation 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, you should 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 knowledgable of the chemigation system and responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Chemigation systems 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 daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) 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 lowerd the injection pump.

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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 decreased 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 the pesticides and capable of being fitted with a system interlock.

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

The pesticide supply tank should be agitated throughout the application of PGR IV.

PGR IV should be applied at the end of the water application.

PGR IV should be applied in sufficient water to provide thorough and even coverage without producing excessive runoff.

Sprinkler Chemigation: 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 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.

