PM 91 1812-402





Under the Federal Insecticide. Frangishda, and Rodenticide Act ಾ ಆವಾಕಾಗೆಂಡೆ. for the pesticide giunored under 1812-402 EFA Beg. No.

AUG 13 1999

GRIFFIN EARLY HARVEST PGR

PLANT GROWTH REGULATOR

ACTIVE INGREDIENTS	
*Cytokinins, as Kinetin	0,0900%
*Gibberellic Acid	
*Indole Butyric Acid	0.0450%
INERT INGREDIENTS	
TOTAL	100.0000%

Contains 26.8 mg cytokinins per fluid ounces Contains 13.4 mg indole butyric acid per fluid ounces Contains 8.9 mg gibberellic acid per fluid ounces

*Plant hormonal compounds in a nutrient solution to stimulate plant growth. Concentrations based on biological activity.

Keep out of reach of children

Caution

Statement of Practical Treatment

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

For medical emergencies involving this product, call toll free 1-888-324-7598.

See Label for Additional Precautions and Directions for Use

GRIFFIN L.L.C. VALDOSTA, GA 31601

EPA REG. NO.1812-EPA EST. NO.

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirts and long pants
- Shoes plus socks
- Waterproof gloves

Follow manufacturer's instructions for cleaning and maintaining PPE. If no 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.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposing of equipment washwaters. Exposed treated seed may be hazardous to birds and other wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. 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.

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 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 and restricted-entry intervals. 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 workers entry into treated areas during the restricted-entry interval (REI) of 12 hours.

EXCEPTION: If the product is soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Shoes plus socks

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 (40CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Keep unprotected persons and pets out of treated areas until sprays have dried.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Protect from freezing. Store out of direct sunlight.

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: 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.

IMPORTANT

Read the entire Directions For Use and the Warranty Statement before using this product. If terms are not acceptable, return the unopened product container at once.

Early Harvest PGR may be applied by ground or air. If applied by air, it is recommended to use 3 to 5 gallons of water per acre. If applied by ground it is recommended to use 5 to 25 gallons of water per acre.

For turfgrass Early Harvest may be applied by ground using 0.2 to 0.5 gallon of water per 1,000 square feet.

Test results have shown that this product can stimulate higher yields through a larger root mass, earlier fruiting and increased fruit retention. Early Harvest PGR is a tool to increase plant efficiency

General Chemigation Instructions

Apply this product only through sprinkler including center pivot, lateral move, 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 knowledgeable 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 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 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 the pesticides and capable of being fitted with a system interlock.

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 Early Harvest PGR. Except for turfgrass, Early Harvest PGR should be applied at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop but not to exceed 8 fluid ounces of Early Harvest PGR per acre per application.

Fill the supply tank ½ full with water, add the appropriate amount of Early Harvest PGR to the tank and finish filling the tank with water.

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 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 a 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 a system interlock.

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 Early Harvest PGR. Except for turfgrass, Early Harvest PGR should be applied at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop but not to exceed 8 fluid ounces of Early Harvest PGR per acre per application.

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Fill the supply tank ½ full with water, add the appropriate amount of Early Harvest PGR to the tank and finish filling the tank with water.

Foliar Spray Program For Vegetable Crops

Beans

Three foliar applications are recommended.

1st Application - Apply 3.2 fluid ounces per acre when the first trifoliate is unfolded.

2nd Application – Apply 3.2 fluid ounces per acre 2 weeks after the first application.

3rd Application - Apply 3.2 fluid ounces per acre at first bloom.

Broccoli, Cabbage, Lettuce, Spinach

Three foliar applications are recommended.

1st Application - Apply 3.2 fluid ounces per acre when the fifth leaf begins to unfold.

2nd Application – Apply 3.2 fluid ounces per acre 2 weeks after the first application.

3rd Application - Apply 3.2 fluid ounces per acre 2 weeks after the second application.

For maximum benefit apply continuous applications of 0.8 to 1.2 fluid ounces per acre at 7 to 10 day intervals after the first application throughout the production season.

Cantaloupe, Cucumber, Watermelon, Honeydew, Squash

Three foliar applications are recommended.

1st Application - Apply 3.2 fluid ounces per acre when the third leaf begins to unfold.

2nd Application - Apply 3.2 fluid ounces per acre 2 weeks after the first application.

3rd Application – Apply 3.2 fluid ounces per agre 2 weeks after the second application.

For maximum yields make continuous applications of 2 ounces per acre at 7 to 10 day intervals after the first application throughout the growing season.

Pepper, Tomato

Three foliar applications are recommended.

1st Application – Apply 3.2 fluid ounces per acre when the plants have three true leaves.

2nd Application – Apply 3.2 fluid ounces per acre 2 weeks after the first application.

3rd Application – Apply 3.2 fluid ounces per acre 2 weeks after the second application.

For maximum yields and quality make continuous applications of 0.8 fluid ounce per acre after the first application at 7 to 10 day intervals throughout the growing season.

Sweet Corn, Pop Corn

Two applications are recommended.

1st Application – Apply 3.2 fluid ounces per acre when the plants are in the four to six leaf stage. 2nd Application – Apply 3.2 fluid ounces per acre at the eight to ten leaf stage.

White or Red Potato

Dip potato seed pieces in a solution of I part Early Harvest PGR to 375 parts water (0.34 fluid

ounces per gallon of water) for 30 to 60 seconds or spray seed pieces with the above solution so that seed pieces are covered and thoroughly wetted. Early Harvest PGR can be used with a fungicide program.

(We have not included the 4 lines after <u>OR</u> because they appear to relate to a dry formulation of this product)

1st Application - Apply 3.2 fluid ounces per acre at tuber initiation which occurs 4 to 6 weeks after emergence.

2nd Application – Apply 3.2 fluid ounces per acre 2 to 3 weeks after the first application. The last application should be at the beginning of bloom in those varieties that flower.

Foliar Spray Program For Fruit Crops

Citrus (Orange)

Two applications are recommended.

1st Application - Apply 3.2 fluid ounces per acre at first bloom.

2nd Application - Apply 3.2 fluid ounces per acre when fruit is approximately ½ inch in diameter.

Strawberry

Two applications are recommended.

1st Application - Apply 3.2 fluid ounces per acre at first bloom stage.

2nd Application - Apply 3.2 fluid ounces per acre 2 weeks after the first application.

Foliar Spray Program For Field Crops

Cotton - Normal Varieties: Apply according to one of the following schedules:

Schedule A:

1" Application - Apply 2 fluid ounces per acre in the seed furrow at planting.

2nd Application - Apply 3 fluid ounces per acre at the pinhead square stage.

3rd Application - Apply 4 fluid ounces per acre at early bloom.

Schedule B:

1" Application - Apply 2 fluid ounces per acre on a band at the 3-7 leaf stage.

2nd Application - Apply 3 fluid ounces per acre at the pinhead square stage.

3rd Application - Apply 3 fluid ounces at early bloom.

Cotton-Transgenic Varieties (Cotton varieties which have been genetically manipulated to have insect-resistance and/or herbicide-resistance built in): Three applications are recommended.

1st Application: Apply 4 fluid ounces per acre in the seed furrow at planting.

2nd Application: At the pin head square stage apply 4 fluid ounces per acre This can be applied in a

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97%

tank mix that contains 4 fluid ounces of Mepex® or other suitable brand of mepiquat chloride that has the same concentration of active ingredients as Mepex.

3rd Application: Repeat the above application at first bloom. If needed for vegetative growth control, repeat the above application at mid-bloom.

Higher rates and/or late season applications may be warranted under high stress conditions where square and/or boll retention is needed. During the bloom and post-bloom period, additional applications or higher rates of

Early Harvest PGR may be applied but do not exceed a total of 24 fluid ounces per acre per season.

Field Corn: Early Harvest PGR works best on varieties that have a tendency for multiple earing. Two applications are recommended.

1st Application – Apply 3.2 fluid ounces per acre at the three to four leaf stage. 2nd Application – Apply 3.2 fluid ounces per acre at the eight to eleven leaf stage.

Grain Sorghum: Two applications are recommended.

1st Application - Apply 3.2 fluid ounces per acre at the three to five leaf stage.

2nd Application - Apply 3.2 fluid ounces per acre at the eighth but before the twelfth leaf stage

Peanuts: Four applications are recommended.

1st Application - Apply 3.2 fluid ounces per acre at the three to five leaflet stage.

2nd Application - Apply 3.2 fluid ounces per acre at initial pegging.

3rd Application - Apply 3.2 fluid ounces per acre 10 to 14 days after the second application.

4th Application – Apply 4.8 fluid ounces per acre during pod fill.

Saybean: Apply according to one of the following schedules:

(1) Apply 3.2 fluid ounces per acre at the three to five trifoliate leaf stage. Apply a second application of 3.2 fluid ounces prior to bloom.

OR

(2) If the first application is missed, apply 6.4 fluid ounces per acre prior to bloom.

Sugar Beets: Two applications are recommended.

1st Application - Apply 3.2 fluid ounces per acre after thinning.

2nd Application - Apply 3.2 fluid ounces per acre 2 to 3 weeks after the first application.

Wheat Apply according to one of the following schedules:

(1) Apply 3.2 fluid ounces per acre prior to jointing. Apply an additional 3.2 fluid ounces at the flag leaf stage.

OR

(2) If the first application is missed, apply 6.4 fluid ounces per acre at the flag leaf stage.

Foliar Spray Program For Rice

Early Harvest PGR should be applied at 3.2 fluid ounces per acre as a foliar spray to the plant during either one of the following stages of development.

Primary Recommendations - three to seven Leaf Stage: This application must be made after the rice seedling has three fully emerged leaves and the fourth leaf is beginning to emerge but before the seedling has completed development of seven leaves or three tillers. This period for application generally begins about 3 to 6 weeks after seeding and ends 5 to 9 weeks after seeding. The duration of this period depends on the variety and the growing conditions. This application may be made in conjunction with corresponding herbicide applications.

Alternate Recommendation – Two Millimeter (mm) Panicle Growth Stage: If the primary application is missed, Early Harvest PGR can be applied to stimulate cell differentiation in the developing panicle. This application must be made when no more than 10% of the main culms are at the 2 mm panicle growth stage. The 2 mm panicle growth stage occurs immediately after internode elongation or joint movement has begun. Early Harvest PGR must be applied as soon as internode elongation is detected so the 2 mm panicle growth stage is not missed. It is better to apply slightly early than to apply late. IMPORTANT: Timing of the application at 2 mm growth stage is critical. Check the entire field for stage of plant development. Large fields may require split applications on upper and lower ends of the field to ensure proper timing throughout the field.

Turfgrass

On all turfgrass regardless of use, no more than 6 fluid ounces per 1000 square per feet per month should be used.

WARM SEASON TURF: (Bermuda, Bermuda hybrids, Zoysia, Centipede, St. Augustine, etc.) For lower traffic areas and where Early Harvest PGR is used as a maintenance program, begin applications early in the growing season. Apply at the rate of 1 to 1.5 fluid ounces per 1,000 square feet. Maintenance application should be made on a 2-3 week schedule throughout the growing season Applications may be made with foliar-applied urea for added benefits.

COOL SEASON TURF: (Tall Fescue, Rye, Bentgrass, Bluegrass, etc.). Apply 1..5 to 2 fluid ounces per 1,000 square feet in fall, or when stand is established. Repeat application in late winter when grasses begin to grow actively.

APPLICATION WITH FOLIAR-APPLIED UREA: Maximum benefit and color can be achieved when Early Harvest PGR applications are made with foliar-applied urea solutions. To prepare urea solution, dissolve 46% urea into spray solution at the rate of 1.0 lb. per 5,000 square feet to be sprayed and apply with the recommended rate of Early Harvest PGR.

SPECIFIC RATES OF APPLICATION:

TEES & GREENS: Apply 1 to 1.5 fluid ounces [er 1.000 square feet on a 2 week schedule throughout the growing season. Begin in early spring after grasses have begun to grow. Sunbelt

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and transition zones should continue spray program throughout playing season. Courses north of the transition zone should continue applications through September.

FAIRWAYS; Begin applications in early spring as soon as grasses have begun to actively grow. Apply 1 fluid ounce per 1,000 square feet and repeat on a monthly schedule as long as grass is growing.

PRE-TOURNAMENT QUICK GREEN-UP: Apply at the rate of 1 to 1.5 fluid ounces per 1,000 square feet in conjunction with urea solution 4 to 5 days prior to playing time. This application should be made with a minimum spray volume of 0.5 gallon of water per 1,000 square feet.

SPRING DORMANCY BREAK: Apply 1 fluid ounce per 1,000 square feet in spring as soon as new growth (opening) is visible. Raking of thatch prior to making this application is most desirable. Application at this time generates rapid growth and often reduce incidence of "spring die back" on certain species of grass.

FALL APPLICATION FOR WINTER HARDINESS: Make two applications 7-10 days apart in late summer or early fall just prior to the cessation of normal active growth. Apply 1 to 1.5 fluid ounces per 1,000 square feet. Application should be made with a spray volume of 0.5 gallon of water per 1,000 square feet. Applications at this time will greatly increase root mass and depth of roots. Winter kill problems are often greatly reduced.

COMMERCIAL TURF, CEMETERIES, ATHLETIC FIELDS, GOLF COURSES, AND OTHER FINE TURF AREAS: Applications of 1 to 2 fluid ounces per 1,000 square feet made at any point during the growing season will produce desirable results. Ideally applications should begin during the very early growth stages and continue on a regular monthly schedule throughout the growing season. Healthier and more beautiful turf can be realized in high traffic areas such as golf greens and tees by making regular applications every two weeks.

SOD FARMS

Apply 4-8 fluid ounces per acre on a monthly basis during the growing season. Two weeks prior to cutting sod, make an application of 4-8 fluid ounces per acre.

SPECIFIC RATES OF APPLICATION:

After sod is cut, a re-establishment program is necessary. This program should start as soon as there is any greening over 30% of the area. Spray with 4-8 fluid ounces per acre of Early Harvest PGR. Repeat in 2 weeks and thereafter once per month throughout the growing season. Make a final application of 4-8 fluid ounces per acre 2 weeks before dormancy.

Start the monthly program again as soon as some green-up has started in the spring.

When species started from seed have reached 1 inch of height the monthly treatment may be started and followed in the same way as non-seeded varieties.

SPECIAL NOTE FOR ALL DIRECT SEEDED CROPS

Early Harvest PGR is a ready-to-use seed dressing that aids in enhancing germination and early season root and top growth. Early Harvest PGR acts through it's unique combination of plant growth regulators.

Early Harvest PGR can be used as an in-furrow spray at the rate of 2 fluid ounces per acre.

Early Harvest PGR can be used at the rate of 1 to 4 fluid ounces per 100 pounds of seed. Sufficient water needs to be added to insure uniform coverage. Improper coverage will minimize product performance.

Seed type				
Cabbage	Cucumber	Onions	Sorghum	Sugar beets
Cauliflower	Dry beans	Peanut	Soybeans	Tomatoes
Com	Lettuce	Peppers	Spinach	Wheat
Cotton	Melons	Rice	Squash	

HOPPER BOX APPLICATION

Partially fill hopper box with a premeasured amount of seed. Apply the appropriate amount of Early Harvest PGR diluted with water on the surface of the seed. Mix with a stick or paddle until all seed are coated. Repeat procedure until hopper box is filled. DO NOT USE TREATED SEED FOR FOOD, FEED OR OIL PURPOSES. Treat only those seeds needed for immediate use and planting. Do not store excess seed beyond planting time.

MECHANICAL SEED TREATERS

Apply the appropriate amount of Early Harvest PGR to a premeasured amount of seed and mix thoroughly until all seed are uniformly coated. Seed may be treated in this manner and stored until used for planting. Do not use treated seed for food, feed or oil purposes. An approved dye must be added to distinguish Early Harvest PGR treated seed and prevent inadvertent use for food, feed or oil purposes. Seed treated with this product must be labeled in accordance with all applicable requirements of the Federal and State seed laws. DO NOT USE TREATED SEED FOR FOOD, FEED OR OIL PURPOSES.

SPECIAL NOTE FOR ALL TRANSPLANTED CROPS

Two methods are recommended for this program.

- A. Dip or spray roots with a solution of 0.75 fluid ounces of Early Harvest PGR per gallon of water prior to transplanting.
- B. Bedding seedlings may be sprayed or drenched in flats 12-24 hours before transplanting

to reduce transplant shock with a solution of 0.75 fluid ounce of Early Harvest PGR per gallon of water.

The foliar program should begin two (2) weeks after transplanting. A combination of the transplant and foliar spray program is most effective.

EARLY HARVEST PGR IS NOT A FERTILIZER. ALWAYS USE WITH GOOD FERTILIZER PRACTICES.

WARRANTY STATEMENT

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factor as weather conditions, presence of other materials or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy, of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, Whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product or at GRIFFINS election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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