



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511M)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

101458-13

Date of Issuance:

7/8/2025

NOTICE OF PESTICIDE:

☒ Registration

☐ Reregistration

(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Crop Protect Direct PGP 1.0

Name and Address of Registrant (include ZIP Code):

JABCO, LLC
c/o Pyxis Regulatory Consulting Inc.
535 Dock St, Ste 211
Tacoma, WA 98402

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency. In order to protect health and the environment, the Administrator, on his or her 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 the 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.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:

Gina Burnett, Senior Regulatory Advisor
Biochemical Pesticide Branch
Biopesticides and Pollution Prevention Division (7511M)
Office of Pesticide Programs

Date:

7/8/2025

2. Make the following labeling change before you release this product for shipment:
 - Revise EPA Registration Number to read, "EPA Reg. No. 101458-13."
3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated 02/03/2025

If you have any questions, please contact Cecilia Kujawa via email at kujawa.cecilia@epa.gov.

Sincerely,

Gina Burnett, Senior Regulatory Advisor
Biochemical Pesticide Branch
Biopesticides and Pollution
Prevention Division (7511M)
Office of Pesticide Programs

Enclosure

Crop Protect Direct PGP 1.0

Plant Growth Regulator for various crops as listed below

ACTIVE INGREDIENTS:		BY WT
3-Indolebutyric acid (IBA)		0.85%
Cytokinin, as Kinetin		0.15%
OTHER INGREDIENTS:.....		99.00%
TOTAL		100.00%

EPA REG. NO. 101458-XX

EPA EST. NO. XXXXX-XX-XXX

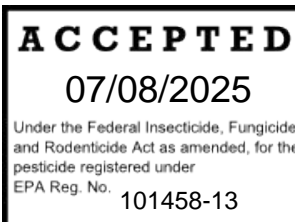
**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For non-emergency information concerning this product, call the National Pesticide Information Center (NPIC) at 1-800-858-7378 (NPIC Web site: www.npic.orst.edu).	

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including] [Storage and Disposal] [instructions][,]

NET CONTENTS:

Manufactured for:
JABCO, LLC
550 W. Pioneer Blvd., Suite 140
Mesquite, NV 89027



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution. The product causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

Applicators and other handlers must wear:

- Long sleeved shirt and long pants,
- Chemical resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, Polyvinyl Chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils, and
- Shoes plus socks.

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

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE 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

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

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 people, either directly or through drift. Only protected handlers may be in the area during applications. For any requirements specific to your State or Tribe, consult the State or 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 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 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,
- Chemical resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, Polyvinyl Chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils, and
- Shoes plus socks.

PRODUCT INFORMATION

Crop Protect Direct PGP 1.0 contains two plant growth regulators (PGRs) as active ingredients: 3-Indolebutyric acid (IBA) and Cytokinin, as Kinetin. Benefits derived from the use of this product include stimulation of early and improved root and shoot development, increased vegetative growth, growth development of flowers and fruit, root growth on plant cuttings and reduction of transplant shock. Refer to the application instructions below for specific details by crop.

A surfactant can be included in the tank mixture if desired based on field experience or further instructions from your local extension service, crop consultant or field representative.

USE DIRECTIONS FOR CHEMIGATION

Apply Crop Protect Direct PGP 1.0 through fixed or standing irrigation systems or through foliar applications. Foliar applications are preferred.

Apply this product only through the following types of irrigation systems:

1. Sprinklers including big gun, solid set or hand move irrigation systems.
2. Calibrated overhead watering booms.
3. Drip (or micro sprinkler) irrigation systems.

Before applying this product through any type of irrigation system, perform a small-scale trial to determine if product performance and phytotoxicity results are acceptable.

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

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

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water systems mean a system for the provision to the public of piped water for human consumption if such a 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 have 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 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 have 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 have 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.

Agitate the pesticide supply tank throughout the application of Crop Protect Direct PGP 1.0. Except for turfgrass, apply Crop

Protect Direct PGP 1.0 at the rate of 20.0 fluid ounces per acre at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop. Fill the supply tank one-half full of water, add the proper amount of Crop Protect Direct PGP 1.0 to the tank and finish filling the tank with water.

DRIP/TRICKLE OR 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 that 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. (This statement only applies to sprinkler chemigation.)

Agitate the pesticide supply tank throughout the application of Crop Protect Direct PGP 1.0. Except for turfgrass, apply Crop Protect Direct PGP 1.0 at the rate of 16.0 to 32.0 fluid ounces per acre at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop.

Fill the supply tank one-half full of water, add the proper amount of Crop Protect Direct PGP 1.0 to the tank and finish filling the tank with water.

Minimum Spray Volume (Gal/Acre)

CROP	GROUND		AIR
	Concentrate	Dilute	
Field Crops, Miscellaneous	10.0	15.0	3.0
Berry and Small Fruits, Vegetables, Vines	25.0	100.0	5.0
Pome Fruits, Stone Fruits, Tree Crops and Tree Nuts	50.0	200.0	10.0
Citrus	50.0	300.0	—

Special considerations: Crop Protect Direct PGP 1.0 compatibility with other agricultural products has not been fully investigated. Always perform a standard jar test of Crop Protect Direct PGP 1.0 and other products to determine tank mix compatibility prior to application; compatibility of Crop Protect Direct PGP 1.0 with other products requires testing for crop safety and performance prior to large-scale use. Products mixed with Crop Protect Direct PGP 1.0 must be acidic (pH less than 7). Do not mix Crop Protect Direct PGP 1.0 with any product(s) having a pH greater than 7. A repeated application may be necessary if it rains within 2 hours after application.

Depending on the equipment used, and specific crop, spray volume applied per acre will vary. Apply sufficient water volume to ensure thorough coverage.

APPLICATION INSTRUCTIONS		
Crop	Quantity of Crop Protect Direct PGP 1.0	Application Directions and Timing
Asparagus	13.0 fl oz/100 gallons water	Apply after harvest when asparagus is in fern stage. Repeated applications can be made every 10 to 14 days.
Berry and Small Fruits including Blackberry, Blueberry, Caneberry, Kiwi, and Raspberry (except Grape and Strawberry)	13.0 fl oz/100 gallons water	After leaves have fully emerged through bloom. Repeated applications can be made every 10 to 14 days up to harvest. Apply 2-3 weeks before frost.
Brassica Vegetables including Broccoli, Cabbage, Cauliflower, and Mustard Greens	13.0 fl oz/100 gallons water	Foliar application: Apply to achieve full coverage. 1st: At 2 to 4 true leaf stage. 2nd: 10 to 14 days after first application. Use a non-ionic surfactant for hard to wet crops like cabbage.
Bulb Vegetables including Garlic, Leek, and Onion	13.0 fl oz/100 gallons water	1st: At 2 to 4 leaf stage. Repeated applications can be made every 10 to 14 days up to 10 days prior to harvest. Thorough coverage and leaf wetting are needed.
Cereal Grains including Barley, Corn ⁽¹⁾⁽²⁾ (field, pop, sweet), Millet, Oats, Rice, Sorghum, and Wheat	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. 2nd: 10 to 14 days after first application.
Citrus Fruits including Grapefruit, Lemon, Lime, Sweet Orange, and Tangerine	13.0 fl oz/100 gallons water	Apply when fruit size is 5 mm. Make more applications if needed. Thorough coverage is necessary.
Coffee	13.0 fl oz/100 gallons water	Apply to newly transplanted coffee to assist rooting. 1st: Annual application prior to bloom. 2nd: 10 to 14 days after first application. 3rd: 45 days prior to harvest. 4th: 30 days prior to harvest.
Cotton ⁽¹⁾⁽²⁾	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days.
Cucurbit Vegetables including Cantaloupe, Cucumber, Honeydew, Muskmelon, Squash (summer and winter), and Watermelon	13.0 fl oz/100 gallons water	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days until harvest.
Forage, Fodder and Straw of Cereal Grains	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. 2nd: 10 to 14 days after first application. More applications between cuttings will improve root structure and increase stand vigor.
Fruiting Vegetables including Eggplant, Pepper, and Tomato	13.0 fl oz/100 gallons water	1st: At 2 to 4 true leaf stage. Repeat applications every 10 to 14 days until harvest.
Grass Forage, Fodder and Hay	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. 2nd: 10 to 14 days after first application. More applications between cuttings will improve root structure and increase stand vigor.
Grass Grown for Seed including Perennial Ryegrass, Tall Fescue, or Bentgrass	2.0* fl oz/A	Apply when growth resumes in the spring. Repeated applications can be made every 10 to 14 days until harvest.
Grape	13.0 fl oz/100 gallons water	1st: Apply when grapes are 2 to 3 mm in size. 2nd: 10 to 14 days after first application. 3rd: 45 days prior to harvest. 4th: 30 days prior to harvest.
Herbs and Spices including Basil, Dill, Mustard, and Sage	2.0* fl oz/A or 13.0 fl oz/100 gallons water	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days until harvest.
Hops	13.0 fl oz/100 gallons water	1st: At 1 to 2 pairs of leaves on main vines. Repeated applications can be made every 14 days.

Crop	Quantity of Crop Protect Direct PGP 1.0	Application Directions and Timing
		Side shoot trimming is an important time to maintain vigorous root growth.
Leafy Vegetables including Celery, Head and Leaf Lettuce, Kale, and Spinach	13.0 fl oz/100 gallons water	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days until harvest.
Legume Vegetables (Succulent or Dried) including Bean (all types), Peas, and Soybeans ⁽¹⁾⁽²⁾	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days.
Mint, Peppermint, Spearmint	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. 2nd: 10 to 14 days after first application. Applications between cutting at 2-week interval will increase root structure, help stand vigor and assist biomass accumulation.
Nongrass Animal Feeds including Alfalfa, Clover, Hay, and Vetch	2.0* fl oz/A	Seedling alfalfa, clover, hay, and vetch: Apply at 2 to 4 trifoliate stage. For established crops, apply at green-up and 5 to 10 days after each cutting.
Oil Seed Crops including Canola ⁽¹⁾⁽²⁾ , Flax, and Sunflower	2.0* fl oz/A	1st: At 2 to 4 leaf stage. Repeated applications can be made every 10 to 14 days until flower.
Peanut	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days. Beginning bloom to beginning seed fill is a critical period.
Pome Fruits including Apple and Pear	13.0 fl oz/100 gallons water	1st: At 5-10 mm fruit. 2nd: 7 to 14 days after first application. Repeated applications can be made every 10 to 14 days.
Root and Tuber Vegetables including Carrot, Ginseng, Horseradish, Parsley (turnip-rooted), Potato, Radish, Sugar Beet, Sweet Potato, Turnip	2.0* fl oz/A or 13.0 fl oz /100 gallons water	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days until harvest. Foliar application: thorough spray coverage is necessary.
Stone Fruits including Apricot, Cherry, Peach, and Plumcot	13.0* fl oz/100 gallons water	1st: At 5-10 mm fruit. 2nd: 7 to 14 days after first application. Repeated applications can be made every 10 to 14 days.
Strawberry	13.0 fl oz/100 gallons water	1st: Spray at transplant. 2nd: 10 to 14 days after first application. Repeated applications can be made every 10 to 14 days.
Sugarcane	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days.
Tobacco	2.0* fl oz/A	1st: At 2 to 4 true leaf stage. Repeated applications can be made every 10 to 14 days.
Tree Nuts including Almonds, Cashews, and Pecans	13.0 fl oz/100 gallons water	After leaves have fully emerged through bloom. Repeated applications can be made every 10 to 14 days.

*If application spray volume is greater than 15.0 gallons per acre, use the dilution rate of 13.0 fluid ounces per 100 gallons water.

⁽¹⁾ This product can be tank mixed with glyphosate products registered for use on Roundup Ready® crops.

⁽²⁾ This product can be tank mixed with products registered for use on LibertyLink® crops.

In-Furrow Application

Crop	Quantity of Crop Protect Direct PGP 1.0	Application Directions and Timing
Asparagus	2.0 to 4.0 fl oz/A	Apply in-furrow or band as a stand alone or in conjunction with a starter fertilizer.
Barley, Corn ⁽¹⁾⁽²⁾ (field, pop, sweet), Grain Sorghum, Oats, Peanuts, Potato, Rye, Soybean, Sugar Beets, Sugarcane, and Wheat	2.0 to 4.0 fl oz/A	Apply at planting in the seed furrow or 2 inches beside and 2 inches below seed or with a strip till machine 3 inches below the seed. Can be applied with or without starter fertilizer.
Cotton ⁽¹⁾⁽²⁾	2.0 to 4.0 fl oz/A	Can be applied in furrow or in the starter band.
Legume Vegetables (Succulent or Dried) including Bean (all types), Peas, and Soybeans ⁽¹⁾⁽²⁾	2.0 to 4.0 fl oz/A	Apply in-furrow or band as a stand-alone or in conjunction with a starter fertilizer.
Oil Seed Crops including Canola ⁽¹⁾⁽²⁾ and Sunflower	4.0 fl oz/A	Apply at planting in the seed furrow or 2 inches beside and 2 inches below seed or with a strip till machine 3 inches below the seed. Can be applied with or without starter fertilizer.
Root and Tuber Vegetables including Carrot, Ginseng, Horseradish, Parsley (turnip-rooted), Potato, Radish, Sugar Beet, Sweet Potato, Turnip	4.0 fl oz/A	Apply in-furrow or band as a stand-alone or in conjunction with a starter fertilizer.

⁽¹⁾ This product can be tank mixed with glyphosate products registered for use on Roundup Ready® crops.

⁽²⁾ This product can be tank mixed with products registered for use on LibertyLink® crops.

For Dip or Drench Transplant Water

Crop	Quantity of Crop Protect Direct PGP 1.0	Application Directions and Timing
Berry and Small Fruits, Brassica Vegetables, Bulb Vegetables, Cucurbit Vegetables, Fruiting Vegetables, and Leafy Vegetables	13.0 fl oz/100 gallons water	Drench can be delivered at 5.0 to 500 gallons/A. At the time of transplant. Drench applications can be delivered as injected transplant solutions or dribbled into the seeding trench. If mixed with nutrients, check compatibility and be certain of nutrient safety facts.
Tobacco	13.0 fl oz/100 gallons water	At the time of transplant. Drench applications can be delivered as injected transplant solutions or dribbled into the seeding trench. If mixed with nutrients, check compatibility and be certain of nutrient safety facts.

For Drench Applications for Field Grown Perennial Crops

Crop	Quantity of Crop Protect Direct PGP 1.0	Application Directions and Timing
Berry and Small Fruits, Citrus, Ornamental Trees, Pome Fruits, Stone Fruits, and Tree Nuts	13.0 fl oz/100 gallons water	Deliver 8.0 to 16.0 fluid ounces of total mix per inch diameter of trunk. Apply monthly anytime the plant is actively growing. Apply with nutrients or other mixes suitable for application 3 to 4 times the trunk diameter up the stem.

For Injection into Drip/Trickle Irrigation

Crop	Quantity of Crop Protect Direct PGP 1.0	Application Directions and Timing
Asparagus, Berry and Small Fruits, Citrus, Brassica Vegetables, Bulb Vegetables, Cucurbit Vegetables, Fruiting Vegetables, Grape, Leafy Vegetables, Legume Vegetables, Pome Fruits, Root and Tuber Vegetables, Strawberry, Stone Fruits, and Tree Nuts	16.0 to 32.0 fl oz/A of water zone	1st application at transplanting. Run the system until the root zone of the treated crop is at 90% field capacity. Inject Crop Protect Direct PGP 1.0 into the system at sufficient concentration to deliver 16.0 to 32.0 fl oz/A of water zone in the last 15 minutes of watering. Established crops: can be treated monthly year-round or from the beginning of annual production until six weeks prior to leaf drop or harvest. Construction of a uniform delivery system is necessary. Use only tested injection and distribution systems. Crops with larger root volume require higher net dose/A to achieve effective root zone concentration.
Hops	16.0 to 32.0 fl oz/A of water zone	1st application at transplanting. Run the system until the root zone of the treated crop is at 90% field capacity. Inject Crop Protect Direct PGP 1.0 into the system at sufficient concentration to deliver 16.0 to 32.0 fl oz/A of water zone in the last 15 minutes of watering. Established crops: can be treated monthly from the beginning of annual production until harvest. Construction of a uniform delivery system is necessary. Use only tested injection and distribution systems. Crops with larger root volume require higher net dose/A to achieve effective root zone concentration.
Container Grown Ornamentals	13.0 fl oz/100 gallons water	Deliver at 1.0 fl oz of solution per one inch of container diameter. Apply monthly anytime the plant is actively growing up until 10 days before sale. Construction of a uniform delivery system is necessary. Use only tested injection and distribution systems.

GREENHOUSE AND NURSERY

For Greenhouse Establishment or Production

Crop	Quantity of Crop Protect Direct PGP 1.0	Application Directions and Timing
Leafy Vegetables including Celery, Head and Leaf Lettuce, Kale, and Spinach	13.0 fl oz/100 gallons in 30-80 gallons per acre	1st: 2-4 true leaves Subsequent applications can be made at 10 to 14-day intervals
Fruiting Vegetables including Eggplant, Pepper, and Tomato	13.0 fl oz/100 gallons in 30-80 gallons per acre	1st: 2-4 true leaves Subsequent applications can be made at 10 to 14-day intervals

TURFGRASS

For Sod Grass: Apply Crop Protect Direct PGP 1.0 by ground using 20.0 to 40.0 gallons of water per acre. Use 2.5 to 6.5 fluid ounces product in 20.0 to 40.0 gallons of water, respectively (1:1000 dilution rate).

For Turfgrass: Apply Crop Protect Direct PGP 1.0 by ground according to the table below using 1.0 to 10.0 gallons of water per 1000 square feet. Use Crop Protect Direct PGP 1.0 for turf growth suppression at the dilution rate of 1:300 (4.2 fluid ounces product per 10.0 gallons water).

Turf	Rate (Crop Protect Direct PGP 1.0/Gal Water/1000 Sq Ft*)	Application Directions and Timing
Warm climate grasses including Bermuda, Bermuda hybrids, Centipede, St. Augustine, and similar warm season grasses	0.13 to 0.65 fl oz/1.0 to 5.0 gal of water/1000 sq ft	Apply at 2-week intervals during the growing season.
Dichondra	0.65 to 1.3 fl oz/5.0 to 10.0 gal of water/1000 sq ft	Apply at 2-week intervals during the growing season.

Cool climate grasses including Bluegrass, Fescue, Rye, and similar cool season grasses	0.13 to 0.65 fl oz/1.0 to 5.0 gal of water/1000 sq ft	Apply at 2-week intervals during the growing season.
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*Apply 0.13 fluid ounce per gallon.

GREENHOUSE AND NURSERY

Differences in responsiveness may vary from one cultivar to another or from one set of growing conditions to another. Unless experience dictates otherwise, prior to widespread use, test a small number of plants from each cultivar to verify desired efficacy.

Foliage Plants

Aglaonema	Aphelandra	Dieffenbachia	Fittonia	Maranta	Philodendron	Schefflera	Syngonium
Ajuga	Caladium	Dracaena	Gynura	Palms	Pilea	Schlumbergera	Tradescantia
Anthurium	Cissus	Ficus	Hoya	Peperomia	Pothos	Spathiphyllum	Similar foliage plants

Application Rates and Timing

For plants less than 2 years old: dilute 0.85 fluid ounce of Crop Protect Direct PGP 1.0 in 10.0 gallons of water (1:1500 dilution rate).

For mature plants: dilute 1.3 fluid ounces Crop Protect Direct PGP 1.0 in 10.0 gallons of water (1:1000 dilution rate).

Repeat applications at 10-to-14-day intervals as needed. Apply the last spray 1 to 2 weeks prior to sale.

Uniform and thorough spray coverage is necessary for the best results.

Bedding and Flowering Plants

Abutilon	Carnation	Coral Bells	Foxglove	Gladiolus	Lily	Osmachus	Salvia	Vinca
Aglais	Champaca	Cyclamen	Fuchsia	Gloxinia	Lupine	Petunia	Scabiosa	Zinnia
Alyssum	Chrysanthemum	Dahlia	Gardenia	Impatiens	Marigold	Poinsettia	Sedum	Similar plants
Calceolaria	Cineraria	Delphinium	Gazania	Iris	Michelia	Portulaca	Sempervivum	
Canna	Columbine	Dianthus	Geranium	Jasminum	Monarda	Roses	Tulips	

Application Rates and Timing

For plants less than 2 years old: dilute 0.85 fluid ounce of Crop Protect Direct PGP 1.0 in 10.0 gallons of water (1:1500 dilution rate).

For mature plants: dilute 1.3 fluid ounces Crop Protect Direct PGP 1.0 in 10.0 gallons of water (1:1000 dilution rate).

Repeat applications at 10-to-14-day intervals as needed. Apply the last spray 1 to 2 weeks prior to sale.

Uniform and thorough spray coverage is necessary for the best results.

Woody Ornamentals

Arborvitae	Azalea	Carissa	English ivy	Juniper	Pine	Rhododendron	Similar plants
Aucuba	Boxwood	Chinese magnolia	Holly	Maple	Podocarpus	Viburnum	

Application Rates and Timing

For plants less than 2 years old: dilute 0.85 fluid ounce of Crop Protect Direct PGP 1.0 in 10.0 gallons of water (1:1500 dilution rate).

For mature plants: dilute 1.3 fluid ounces Crop Protect Direct PGP 1.0 in 10.0 gallons of water (1:1000 dilution rate).

Repeat applications at 10-to-14-day intervals as needed. Apply the last spray 1 to 2 weeks prior to sale.

Uniform and thorough spray coverage is necessary for the best results.

Garden Grown Tree Fruits

Apple	Cherry	Grape	Lemon	Mango	Persimmon	Starfruit
Asian pear	Fig	Jujubee	Litchi	Orange	Plum	Similar plants
Apricot	Guava	Kumquat	Longara	Peach	Prunes	

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Uniform and thorough spray coverage is necessary for the best results.

PLANT CUTTINGS

- To propagate new plants from cuttings.
- Treated cuttings can be expected to produce uniform roots resulting in beautiful, symmetrical plants.
- For use on most home, tropical, greenhouse and nursery plants.

Type of Cutting	Dilution Rate
Soft wood	1:20 dilution rate (0.5 fluid ounce product in 10.0 fluid ounces of water)
Medium wood	1:10 dilution rate (1.0 fluid ounce product in 10.0 fluid ounces of water)
Hard wood	1:5 dilution rate (2.0 fluid ounces product in 10.0 fluid ounces of water)

For Rooting House Foliage, Tropical and Hardy Ornamentals, Leaf, Greenwood and Softwood Cuttings, Woody Ornamentals, Deciduous Hardwoods, Evergreens, Ground Covers, and Perennials including:

Acanthopanax	Catalpa	Dogwood	Heath	Manzanita	Rhododendron
African violet	Chamaecyparis (False Cypress)	Douglas Fir	Heather	Maple	Rose
Apple (ornamental)	Chaste tree	Escallonia	Hemlock	Matrimony vine	Russian Olive
Arborvitae, American	Chestnut	Euonymus	Hibiscus	Minor	Snowball
Arbutus	Chokeberry	Flowering Crab apple	Holly	Myrtle	Sourwood
Azalea (evergreen & semi-evergreen)	Cotoneaster	Flowering Quince	Honeysuckle	Oak	Spirea
Aster	Crape-myrtle	Forsythia	Ivy	Olive (ornamental)	Tulip Tree
Barberry	Clematis	Fuchsia	Japanese quince	Orange, sour (ornamental)	Umbrella Pine
Begonia	Cryptomeria	Gardenia	Jasmine	Pachysandra	Viburnum
Birch	Chrysanthemum	Geranium	Juniper	Pecan (ornamental)	Vinca
Bittersweet	Cypress	Germander	Lilac	Photinia	Yew
Boxwood	Dahlia	Grape (ornamental)	Locust	Pivet	Wriggle
Camellia	Delphinium	Hawthorne	Magnolia	Pyracantha (Firethorn)	Many others

USE INSTRUCTIONS: Obtain cuttings from vigorous, healthy plants. Keep cuttings moist and cool such as in an ice chest. With a sharp knife, trim the cutting (2 to 8 inches long) with a diagonal cut just below a node or leaf. Dip the basal end of cutting, individually or in bunches, into the Crop Protect Direct PGP 1.0 solution for 3 to 5 seconds.

Note: Following dipping, place cuttings into planting medium. Depending on the species, rooting will take place in several weeks or months under a moist greenhouse environment. Transplant once the cuttings have rooted.

Shrubs, Flowers, Groundcovers and Houseplants including, Rose, Arborvitae, Gardenias, Flowering Trees and other ornamentals

USE INSTRUCTIONS: In bare root transplant or from containers: Use 2.0 tablespoons of Crop Protect Direct PGP 1.0 per 10.0 gallons of water. Apply solution to root area in transplanting hole and then cover roots with soil. After planting, repeat applications biweekly as a drench to thoroughly wet the root area using a solution consisting of 1.0 tablespoon of Crop Protect Direct PGP 1.0 per 10.0 gallons of water.

Annual and Perennial Flowers (bedding plants)

USE INSTRUCTIONS: Use 1.0 tablespoon of Crop Protect Direct PGP 1.0 per 10.0 gallons of water and apply to thoroughly saturate roots at time of planting. Repeat at weekly intervals until plants are well established.

Groundcovers including, Ivy, Iceplant, Geranium, Cotoneaster, Barberry, and Ajuga

USE INSTRUCTIONS: Use 1.0 tablespoon of Crop Protect Direct PGP 1.0 per 10.0 gallons of water and apply thoroughly to saturate the root area at time of planting. Repeat at weekly intervals until plants are well established.

Houseplants (repotting and planting)

USE INSTRUCTIONS: Use 1.0 tablespoon of Crop Protect Direct PGP 1.0 per 10.0 gallons of water and water thoroughly at weekly intervals to saturate the root zone until plants are well established.

Established Plants

USE INSTRUCTIONS: To continue new root growth, use 1.0 tablespoon of Crop Protect Direct PGP 1.0 per 10.0 gallons of water and water plants with solution once a month.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store product in the original container. Store product in a cool, dry locked place out of the reach of children and 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 HANDLING: Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent). 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 1/4 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. 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. **For chemical spill, leak, fire or exposure, call CHEMTREC at 1-800-424-9300.**

LIMITED WARRANTY AND DISCLAIMER

NOTICE: JABCO, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use. Buyer to assume all risks of use and handling which is a variance in any way with the directions herein. To the extent consistent with applicable law, JABCO, LLC makes no other express or implied warranty of fitness or merchantability. To the extent consistent with applicable law, in no case shall JABCO, LLC or the seller be liable for consequential, special or indirect damage resulting from the use or handling of this product. JABCO, LLC and Seller offer this product, and the Buyer and user accept it, subject to the foregoing Limited Warranty and Disclaimer which may be varied only by agreement in writing signed by a duly authorized representative of JABCO, LLC.

Roundup Ready® is a registered trademark of Bayer CropScience.

LibertyLink® is a registered trademark of BASF.

[EPA Approval Date]