

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 23, 2022

Michael Kellogg, Agent Plant Health Care, Inc. c/o Pyxis Regulatory Consulting Inc. 4110 136th St. Ct. NW Gig Harbor, WA 98332

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 – to add statement

"FOR USE IN CALIFORNIA" and to specify that in California the product only may

be used for suppression of certain species of nematodes

Product Name: ProAct

EPA Registration Number: 71771-3 EPA Receipt Date: 05/02/2022 Action Case Number: 00359555

Dear Mr. Kellogg:

The U.S. Environmental Protection Agency (EPA) is in receipt of your application for notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Biopesticides and Pollution Prevention Division (BPPD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped "Notification" and will be placed in our records. You must submit one (1) copy of the final printed labeling with the modifications.

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 the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and is subject to review by the 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 the 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 the 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 the EPA's Office of Enforcement and Compliance Assurance.

Page 2 of 2 EPA Reg. No. 71771-3 Action Case No. 00359555

If you have any questions, please contact Michael Glikes by phone at (202) 566-1461 or via email at glikes.michael@epa.gov.

Sincerely,

Alan Reynolds, Team Leader Emerging Technologies Branch Biopesticides and Pollution Prevention Division (7511M) Office of Pesticide Programs

Enclosure

# NOTIFICATION

71771-3

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

05/23/2022

[Note to reviewer: [Text] in brackets indicates optional text].

# **ProAct Master Label Index**

Section A:	Agricultural & Commercial Uses
Section B:	
Section C:	Pre-Plant Seed Treatment
Section D:	Residential (Home & Garden) Use
Section E:	.Bulk Product – For Re-packaging or Formulating Use Only

# Section A. Agricultural & Commercial Uses

# **ProAct®**

[ Alternate Brand Names: EMPLOY®, PHC-575, EMPLOY® H&T, Messenger® Gold, αβpro ]

# [FOR USE IN CALIFORNIA]

# A Biochemical Pesticide [OPTIONAL TEXT: for foliar use] that:

[OPTIONAL TAG LINES – For use individually or in combination on labels: Is especially formulated for row crops; Improves stand establishment; Improves standability; Decreases lodging; Increases plant stamina and vigor; Plant Health Regulator; Plant Health Promoter; Suppresses nematode egg production[\*]; Enhances crop growth, quality, and yield; Enhances growth; Yield enhancer; Aids in management of post-harvest diseases; Reduces Tobacco Specific Nitrosamines (TSNAS); Reduces transplant shock; Harp-N-Tek<sup>TM</sup> inside [LOGO]; Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology; Extends post-harvest shelf life and salability; Extends post-harvest shelf life and salability of leaf lettuce; Extends post-harvest shelf life and salability of leaf lettuce; Extends post-harvest shelf life and salability of leafy vegetables.][\*In California, only for suppression of the following nematodes: root knot, soybean cyst, root lesion & northern root knot.]

### Wettable Dry Granule

# **ACTIVE INGREDIENT:**

Harpinαβ Protein:	1.0%
Other Ingredients	99.0%
Total1	00.00%

EPA Reg. No. 71771-3 EPA Est. No. XXXXX-XX-XXX

# CAUTION PRECAUCIÓN

See additional precautionary statements elsewhere on this label.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle (If you do not understand the label, find someone to explain it to you in detail.)

PLANT HEALTH CARE, INC. 242 South Main Street, Suite 216 Holly Springs, NC 27540 1-800-421-9051

# www.planthealthcare.com

# **NET WEIGHT:**

Read the entire label before using this product. Read WARRANTY AND DISCLAIMER before buying or using. If terms are not acceptable, return at once unopened.

# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if inhaled. Avoid breathing dust or spray mist. Remove and wash contaminated clothing before reuse.

FIRST AID					
	Move person to fresh air.				
If Inhaled:	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>				
HOT I INC NUMBER					

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

For emergency medical treatment information, call the National Pesticide Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific Time, seven days a week. During other times, call the poison control center at 1-800-222-1222.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants.
- Shoes and socks.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist 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.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into 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 when disposing of equipment wash waters or rinsate.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any 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 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) and restricted-entry interval. The requirements in this box 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.

**Exception:** If the product is soil injected or 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; and
- Shoes and socks.

### NON-AGRICULTURAL USE REQUIREMENTS

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

Keep unprotected persons out of treated areas until sprays have dried.

# **PRODUCT INFORMATION**

ProAct stimulates the plant's natural growth and defense systems, enhancing overall plant health. [ALTERNATE TEXT: ProAct stimulates the natural growth and defense systems of crops, enhancing overall plant health.] Healthier plants exhibit increased plant stamina and vigor, leading to one or more of the following benefits: increased plant growth, improved stand, suppressed nematode egg production, increased marketable yield, enhanced quality, extended shelf life, and improved transplant recovery.

ProAct is a tool for use in Integrated Crop Management (ICM). [ALTERNATE TEXT: ProAct is a tool for use in Integrated Landscape Management.] It has no direct killing effect on pests. Product efficacy is based on its ability to activate the plant's own internal defense and growth mechanisms. ProAct works best when used in conjunction with good crop management practices. [ALTERNATE TEXT: ProAct works best when used in conjunction with good landscape management practices.]

# NEMATODE EGG SUPPRESSION AND PLANT GROWTH

ProAct can be used to suppress nematode egg production while improving plant and root growth. ProAct offers a different mode of action for nematode suppression. Use of a labeled pre-plant application of a soil fumigant, contact nematicide, or nematacidal seed treatment is typically needed for nematode suppression in most crops. [ALTERNATE TEXT: Use of a labeled pre-plant application of a soil fumigant, contact nematicide, or nematacidal seed treatment is suggested for nematode management in most situations.] Apply ProAct for supplemental suppression of nematode egg production.

#### **GROWTH ENHANCEMENT AND MARKETABLE YIELD**

Use ProAct to overcome transplant shock, enhance plant growth and quality, mend rhizomatous turf types, and increase plant health and vigor to assist in the management of certain diseases and to enhance crop quality and marketable production.

#### **POST-HARVEST BENEFITS**

Use ProAct to extend shelf life and overcome transplant shock through pre-harvest applications.

[ALTERNATE TEXT: Use ProAct to extend post-harvest shelf life and salability of head lettuce. Use ProAct to extend post-harvest shelf life and salability of leaf lettuce. Use ProAct to extend post-harvest shelf life and salability of spinach. Use ProAct to extend post-harvest shelf life and salability of leafy vegetables. Use ProAct to extend post-harvest shelf life and salability.]

#### SITES

Use ProAct for greenhouse, shadehouse, nursery, and field production of all plants listed on this label. [ALTERNATE TEXT: Use ProAct on plants in ornamental gardens, athletic fields, parks, golf courses, and public or private lawns and grounds, and that are intended for aesthetic purposes or climatic modification.]

#### **COVERAGE**

Use spray volume adequate to obtain coverage without runoff. Uniform or full leaf coverage is helpful but is not required.

#### **DAYS TO HARVEST**

ProAct can be applied up to the day of harvest.

#### **USE PRECAUTIONS**

#### **USE PROMPTLY**

Use product on the same day it is mixed with water and use opened packages within 3 weeks. Carefully reseal opened packages to minimize exposure to air and moisture.

#### **TANK MIXING**

**Use in Mixtures:** ProAct is believed to be compatible with most other labeled pesticides, such as post-emergence herbicides, insecticides, acaricides, and fungicides, as well as most foliar nutritional products. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry flowables first, then flowables, and then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the spray tank. Do not mix this product with any other product containing a label prohibition against such mixing. When tank mixing ProAct with any other approved pesticide, always read and follow all use directions, restrictions, and precautions of both ProAct and the tank mix partner(s). The resulting tank mix must be used in accordance with the most restrictive label limitations and precautions. Do not exceed label dosage rates. [ALTERNATE TEXT: If ProAct cannot be put in the tank first, before adding it to the tank, slurry the ProAct in a small amount of clean water and add the slurry to the tank.]

**Glyphosate Herbicides:** When tank mixing ProAct with glyphosate for application on crops designated Roundup Ready<sup>®</sup>, only use formulations of glyphosate herbicide that are fully labeled for use on Roundup Ready<sup>®</sup> crops. Never spray this mixture on crops that are not designated Roundup Ready<sup>®</sup> as severe injury or death of the crop can occur. Some glyphosate formulations allow for the addition of surfactants. Please refer to the surfactant recommendations from the manufacturer.

**Precautions:** Do not use ProAct in tank mixes or water below pH 5 or above pH 10. Do not mix this product with pyrophosphates, phosphoric acid, or other strong oxidizers.

**Surfactants:** Use only non-ionic adjuvants approved for use on growing crops.

### **JOPTIONAL TEXT: DILUTION WATER QUALITY**

If dilution water is high in total mineral content, salinity, suspended solids and/or exhibits any other factors that reduce the solubility of ProAct, then first dissolve ProAct in an appropriate volume of "clean water" such as municipal tap water. Pour the dissolved ProAct solution into the dilution water for the spray (see step 1 of "Mixing Instructions").]

# **[OPTIONAL TEXT: DILUTION WATER QUANTITY**

If 1 ounce of ProAct is diluted in more than 35 gallons of chlorinated water (e.g., municipal water), add a labeled water treatment product to remove excess chlorine before adding ProAct. Consult your Plant Health Care representative if you need further directions on water treatment.]

#### **CROP RIPENING**

Crop maturity can infrequently differ in crops treated with ProAct. User must monitor crops for maturity and harvest accordingly.

#### RAIN

Do not apply during rain. Reapplication is not necessary if the spray has dried before rain begins.

#### STRESSED PLANTS

Plants must be actively growing at the time of foliar applications. Applications made to plants that are stressed by extreme heat, cold, moisture, or nutrient deficiency can be less effective.

#### SPRAY DRIFT

Avoiding spray drift at the application site is the responsibility of the applicator. The interactions of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering these factors when making decisions.

#### **MIXING INSTRUCTIONS**

- Step 1. Fill at least one-half of the mix tank with clean water. Provide gentle agitation.
- **Step 2.** [**OPTIONAL TEXT:** If 1 ounce of ProAct is diluted in more than 35 gallons of chlorinated water, add a labeled water treatment product and continue gentle agitation (see Use Precautions on "Dilution Water Quantity").]
- **Step 3.** [**OPTIONAL TEXT**: If dilution water quality is suspect, dissolve ProAct in clean water before adding to the mix tank (see Use Precautions on "Dilution Water Quality").] Add the required amount of ProAct. Agitate until dissolved and avoid excessive foaming.
- Step 4. If tank mixing, add other materials to the mix tank. Add remaining water to mix tank.
- Step 5. Continue gentle agitation and apply promptly.

#### **APPLICATION INSTRUCTIONS**

Apply ProAct as a pre-transplant foliar, root dip, or as a foliar application, including pre-harvest foliar applications for post-harvest benefits. [**ALTERNATE TEXT**: Apply ProAct as a pre-transplant root dip or as a foliar application.]

**Pre-Plant Dip:** Apply ProAct as a pre-plant foliar or root dip to vegetable crops (e.g., cucurbit and cole vegetables), ornamentals, tobacco, and small fruit crops at the rate of 1 – 9 oz per 100 gallons of water immediately prior to transplanting. [**ALTERNATE TEXT**: Apply ProAct as a pre-plant foliar or root dip to bare root ornamentals at the rate of 3 – 9 oz per 100 gallons of water immediately prior to transplanting.] [**OPTIONAL TEXT**: Wash transplants to remove excess soil prior to dipping.] Completely immerse planting stock in solution. Dip, soak, or expose plants for a minimum of 2 to 5 minutes. DO NOT reuse dip solution. Dispose of dip solution according to local restrictions. Plant treated plants as quickly as possible. For continued crop management, follow with foliar applications of ProAct as specified in the tables that follow. [**ALTERNATE TEXT**: For continued plant management, follow with foliar applications of ProAct as specified in the sections that follow.]

**Foliar Application:** Apply ProAct as a greenhouse or field application using conventional ground or aerial equipment. Use ProAct to enhance plant growth and vigor, to increase marketable production, or as part of an integrated pest management (IPM) program to assist disease management and obtain post-harvest benefits.

### [ALTERNATE TEXT:

- **LANDSCAPE PLANTS**, such as broadleaf and coniferous trees, fruit trees, palms, vines, shrubs, brambles, berries, ground covers, perennials, and annual ornamental plants: Once per month during the growing season, apply 2 oz of ProAct per 50 gallons of water to landscape plants.
- **TURF**, such as public and private lawns and grounds, golf courses and greens, athletic fields, and parks: Once per month during the growing season, apply 2 oz of ProAct per acre of turf. If using more than 70 gallons of chlorinated water (e.g., municipal water) per acre of turf, add a labeled dechlorinator with water before adding ProAct.]

Application via Sprinkler or Drip (Trickle) Chemigation Systems: Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move) and drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury and lack of effectiveness can result from non-uniform distribution of treated water. If you have questions about your system's 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. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Sprinkler Chemigation System Requirements: 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 back-flow. 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. Apply product continuously for the duration of the water application.

Drip (Trickle) Chemigation System Requirements: 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 back-flow. 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. Apply product continuously for the duration of the water application.

#### **CROPS AND APPLICATION RATES**

Use the following tables to make decisions on application rates and timing. Follow applicable specifications for your crop.

# Nematode Suppression

Use ProAct for supplemental suppression of nematodes. Use ProAct in conjunction with other nematode management practices. Use rates are specified beside each crop or crop grouping in tables below					
Crop Use Instructions					
DIRECT-SEEDED CROPS	In Field: Use ProAct following a pre-plant application of soil fumigant, contact nematicide, or nematicidal seed treatment, if available. Make first foliar application of ProAct at 2 – 3 weeks after plant emergence. Re-apply as specified in tables below.				
TRANSPIANTED OPODO	Use ProAct following a pre-plant application of soil fumigant, contact nematicide, or nematicidal seed treatment, if available.				
TRANSPLANTED CROPS	<b>Pre-Plant:</b> Apply ProAct as a pre-plant foliar or root dip at the rate of 3 – 9 oz per 100 gallons of water immediately prior to transplanting.				

	In Field: Make first foliar application of ProAct at 2 – 3 weeks after transplanting. Re-apply as specified in tables below.
PERENNIAL CROPS	In Field: Use ProAct following a pre-plant application of soil fumigant, contact nematicide, or nematicidal seed treatment, if available. Make first foliar application of ProAct after plants break dormancy and begin root growth. Reapply as specified in tables below.

**Greenhouse and Transplant Applications** 

Use Site & Crop	Rate	Timing
Greenhouse:	1 – 9 oz per	Apply overhead applications after seedling emergence.
Any Crop Listed Elsewhere on	100 gal water	Repeat every 14 – 21 days.
This Label		
Transplant:	1 – 9 oz per	Apply 5 – 7 days before transplanting. Can also be
Any Crop Listed Elsewhere on	100 gal water	applied as a plant drench at transplanting.
This Label		

**Vegetable and Other Crops** 

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
PERENNIAL	1-9	10 – 200	Apply as a foliar spray at 14-day intervals, beginning at new
VEGETABLES		by ground	growth. [ALTERNATE TEXT: Begin applications when new
Globe Artichoke, Asparagus		2 - 50	growth starts in spring. Repeat at 21- to 28-day intervals as needed.]
РОТАТО		by air	Apply at tuber initiation. Repeat applications as needed every 21 – 28 days.
POTATO			Apply at first hook and repeat applications as needed every
Seed production			21 – 28 days.
OTHER ROOT AND TUBER			Apply at 14-day intervals, beginning at new growth.
VEGETABLES - All crops			[ALTERNATE TEXT: Apply after complete emergence
			during vegetative growth phase.]
OTHER VEGETABLES -			Begin applications at first new growth and repeat at 14-day
Bulb, Leafy, Cole, Fruiting,			intervals. [ALTERNATE TEXT: Begin applications prior to
Cucurbit, Legume – All			first bloom. Repeat applications at 21- to 28-day intervals.
crops			For direct-seeded plants, begin at first true leaf.]
SWEET CORN	0.5 - 9	10 – 200	Apply at 14-day intervals, beginning at first new growth.
(Fresh or Seed)		by ground	[ALTERNATE TEXT: Make 1 – 2 applications before
		2 - 50 by air	tassels present.]

Field Crops

Cran	Data	Dilution	Timina
Crop	Rate	Dilution	Timing
	(Oz/Acre)	(Gal/Acre)	
COTTON	0.5 - 9	5 – 200	Apply at first true leaf, first bloom, and 21 days after first
		by ground	bloom to boost overall growth and production. For
		2 - 50	suppression of pests, begin applications prior to infestation
			and repeat at 14-day intervals. [ALTERNATE TEXT: Apply
		by air	between 2 leaf stage and mid-bloom.]
CORN			Apply at 14-day intervals, beginning at new growth.
(Grain, Silage, Seed or Pop)			[ALTERNATE TEXT: Apply after complete emergence
			during vegetative growth phase.]
SOYBEAN			Begin applications at first new growth and repeat at 14-day
			intervals. [ALTERNATE TEXT: Begin applications prior to
			first bloom. Repeat applications at 21- to 28-day intervals.
			For direct-seeded plants, begin at first true leaf.]
OILSEED CROPS - All			Begin applications at new growth and repeat at 14-day
crops			intervals through harvest. [ALTERNATE TEXT: Apply after
			complete emergence during vegetative growth phase.]
SUGAR BEETS			Apply at 14-day intervals, beginning at new growth.
			[ALTERNATE TEXT: Apply after complete emergence
			during vegetative growth phase.]

CEREAL GRAINS	Apply at 14-day intervals, beginning at new growth.
– All crops	Apply as needed for wheat sheath blight. [ALTERNATE
	TEXT: Apply after complete emergence during vegetative
	growth phase.]
FORAGE CROPS	Apply at 14-day intervals, beginning after new growth
(Grass, Hay, Nongrass)	commences and at cutting. [ALTERNATE TEXT: Apply
	after new growth commences and at each cutting. For
	newly seeded crops, begin at first true leaf.]
SUGARCANE	Apply after new growth commences. Repeat at 28- to 35-
	day intervals as needed.

# Tobacco

Crop	Rate	Dilution	Timing
	(Oz/Acre)	(Gal/Acre)	
TOBACCO -	1 – 13	10 – 200	Apply at 14-day intervals, beginning 7 days after
All Types		by ground	transplanting through harvest. [ALTERNATE TEXT: Begin
		2 - 50 by air	applications when plants are established. Repeat at 21- to 28-day intervals as needed.]

# **Berries and Small Fruit**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
BERRIES AND SMALL FRUIT - All Types	1 – 13	10 – 200 by ground 2 - 50 by air	Apply at 14-day intervals while plants are actively growing, beginning in the greenhouse or nursery and after transplanting. For fall-transplanted strawberries, resume applications in spring. [ALTERNATE TEXT: Begin applications when plants are established or 14 days after full leaf emergence. Repeat at 21- to 28-day intervals as needed. ]

# **Trees and Vines**

Crop	Rate	Dilution	Timing
	(Oz/Acre)	(Gal/Acre)	
AVOCADO	1-13	10 – 200	Apply at 14-day intervals, beginning at new growth.
		by ground	[ALTERNATE TEXT: Apply at 21- to 35-day intervals,
		2 - 50	beginning before bloom initiation.]
CITRUS		by air	Apply at 14-day intervals, beginning at new growth.
		by an	[ALTERNATE TEXT: Apply at 21- to 35-day intervals,
			beginning before bloom initiation.]
TREE NUTS			Apply at 14-day intervals, beginning at new growth.
			[ALTERNATE TEXT: Apply at 21- to 35-day intervals,
			beginning before bloom initiation.]
POME FRUIT			Apply 2 pre-bloom sprays, once at new growth and again 7
Apple, Pear			- 10 days later. Follow with post-bloom sprays at 14- day
			intervals. [ALTERNATE TEXT: Apply at 21- to 35-day
STONE FRUIT			intervals, beginning before bloom initiation.]
STONE FRUIT			Apply 2 pre-bloom sprays, once at new growth and again 7
			<ul> <li>10 days later. Follow with post-bloom sprays at 14- day intervals. [ALTERNATE TEXT: Apply at 21- to 35-day</li> </ul>
			intervals, beginning before bloom initiation.] For peaches,
			apply at pit hardening and again 21 days later.
VINE CROPS			Apply at 14-day intervals, beginning when new shoot
Grapes (Juice, Raisin,			growth is present. Under moderate to heavy disease
Table, Wine), Kiwifruit, Hops			pressure, optimal results can be obtained by alternating or
			tank mixing with other products. [ALTERNATE TEXT: Apply
			at 21- to 28-day intervals, beginning when new shoot
			growth is present.]
TREES			Apply after complete emergence.
Conifer, Broadleaf			

# **Turf and Ornamentals**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
TURF GRASSES – All Types Sod Farms Golf Courses	0.5 – 8	10 – 200 by ground 2 - 50 by air	Begin applications when plants are established or 14 days after full emergence. Repeat at 28- to 35-day intervals.
ORNAMENTALS	1 – 9	10 – 200 by ground 2 - 50 by air	Apply at 14- to 17-day intervals, beginning 7 days after transplant and/or potting/repotting or once plants have initiated bud/leaf or fully leafed out. For roses, begin applications 7 days after grafted cuttings are planted and continuing at 14- to 17-day intervals. [ALTERNATE TEXT: Begin applications prior to first bloom. Repeat at 21- to 28-day intervals.]

**Specialty Crops** 

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
ALOE BANANA COFFEE FIGS HERBS – All Types MANGO MINT – Spearmint, Peppermint PAPAYA PINEAPPLE	1 – 13	10 – 200 by ground 2 - 50 by air	Apply at 21- to 28-day intervals, beginning 7 days after new growth/new spring growth is initiated.

# **Grasses Grown For Seed**

Сгор	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
TURF GRASSES	0.5 - 9	10 – 200	Apply at 14-day intervals, beginning 14 days after full
FORAGE GRASSES		by ground	emergence.
		2 - 50	
		by air	

**Pre-Harvest Applications for Post-Harvest Benefits** 

Crop	Rate	Dilution	Timing
	(Oz/Acre)	(Gal/Acre)	
Any Crop Listed Elsewhere on This Label	1 – 10		Apply 1 – 14 days before harvest. If no previous applications of ProAct have been made, use higher rates.
		2 - 50 by air	

**Foliar Nutrient Applications** 

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
Any Crop Listed Elsewhere on This Label	1 – 4		Apply with foliar fertilizer applications at a rate of 1 oz ProAct per 5 lb foliar fertilizer.
		2 - 50 by air	

#### STORAGE AND DISPOSAL

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

### **PESTICIDE STORAGE**

Keep product away from exposure to air, sunlight, moisture, or heat. Do not store in temperatures over 110°F for more than 7 days. Use product within 3 weeks of opening and the same day as mixing.

#### PESTICIDE DISPOSAL

Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER HANDLING**

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### WARRANTY AND DISCLAIMER

### **CONDITIONS OF SALE AND EXCLUSIVE WARRANTY**

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop [ALTERNATE TEXT: Plant] injury, ineffectiveness of the product, or other unintended consequences may result because of such factors as horticultural practices, use with other products (unless otherwise expressly provided in the Directions for Use of this product), presence of other materials, the manner of use or application, and various environmental conditions, including but not limited to weather conditions and moisture conditions. To the extent consistent with applicable law, all of the aforementioned risks are beyond the control of Plant Health Care, Inc. and the Buyer shall assume all such risks.

#### **EXCLUSIVE WARRANTIES**

Plant Health Care, Inc. warrants that, at the time of first sale of this product, it conforms to the chemical description on this label and, under normal conditions, is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. To the extent consistent with applicable law, if this product does not perform as warranted above, customer's sole remedy for breach of that warranty shall be replacement of the product or refund of the purchase price paid, at the option of Plant Health Care, Inc. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND SATISFACTORY QUALITY.

#### LIMITATION OF LIABILITY

To the extent consistent with applicable law, Plant Health Care, Inc. excludes for itself and its suppliers any liability, whether based in contract or tort (including negligence), for incidental, consequential, indirect, special, or punitive damages of any kind, or for loss of revenue or profits, loss of business, or crop [ALTERNATE TEXT: plant] injury arising out of or in connection with the sale, use, injury, performance, or failure of this product, even if Plant Health Care, Inc. or its authorized reseller has been advised of the possibility of such damages, and limits its liability to replacement of the product or a refund of the purchase price paid, at the option of Plant Health Care, Inc. This disclaimer of liability for damages will not be affected if any remedy provided by this label fails of its essential purpose.

### **ASSUMPTION OF RISK**

To the extent consistent with applicable law, Buyer and User of this product assume the risk of any use contrary to the Directions for Use and/or all of the risks inherent in the use of the product as set forth above. Plant Health Care, Inc. offers this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Exclusive Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Plant Health Care, Inc.

#### PROMPT NOTICE OF CLAIM

Plant Health Care, Inc. must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from the date of application) so that an inspection of the affected property and growing crops [ALTERNATE TEXT: plants] may be made. To the extent consistent with applicable law, unless Buyer and User promptly notify Plant Health Care, Inc. of any claims, they shall be barred from obtaining any remedy.

# **TANK MIXES**

To the extent consistent with applicable law, tank mixing or use of this product with any other product, which is not specifically and expressly authorized by this label, shall be the exclusive risk of User, Applicator, and/or Application Advisor. Read and follow the entire label of each product to be used in a tank mix with this product.

# **LIMITED USE LICENSE AND PATENTS**

The contents of this package and/or the use of the contents are covered by U.S. Patent Nos. 5,849,868, 5,859,324, 5,776,889, 5,977,060, and 6,277,814 as well as pending patent applications. The purchase of this package grants the Buyer a license, under these patents and patent applications, to use its contents only for treating plants, plant seeds, and other plant parts as described by this label.

© 2019 Plant Health Care, Inc. [product name] is a registered trademark and the Plant Health Care™ logo is a trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product. Roundup Ready® is a registered trademark of Monsanto Technology LLC.

[BARCODE]

XX.XXXX ProAct US Ag

# **Section B. Commercial Seed Treatment**

# **ProAct®**

[ Alternate Brand Names: N-Hibit® Gold CST, N-Hibit® HX-209]

# **Seed Treatment**

[OPTIONAL TAG LINES – For use individually or in combination on labels: A biochemical pesticide seed treatment for yield enhancement; Increases root mass, plant stamina and vigor; Enhances yield; <u>Yield enhancer</u>; Improves standability; Decreases lodging; Increases plant stamina and vigor; Plant Health Regulator; Plant Health Promoter; Activates plant growth and defense systems; Suppresses nematode egg production; Increases Root Mass; Enhances plant health; Facilitates Integrated Pest Management Programs; Harp-N-Tek<sup>TM</sup> inside [LOGO]; Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology.]

# FOR USE ONLY BY COMMERCIAL SEED TREATMENT FACILITIES Wettable Dry Granule

### **ACTIVE INGREDIENT:**

 Harpinαβ Protein:
 1.0%

 Other Ingredients
 99.0%

 Total
 100.00%

EPA Reg. No. 71771-3

EPA Est. No. XXXXX-XX-XXX

# **KEEP OUT OF REACH OF CHILDREN**

# CAUTION PRECAUCIÓN

See additional precautionary statements elsewhere on this label.

PLANT HEALTH CARE, INC. 242 South Main Street, Suite 216 Holly Springs, NC 27540

1-800-421-9051

www.planthealthcare.com

**NET WEIGHT:** 

Read the entire label before using this product. Read WARRANTY AND DISCLAIMER before buying or using. If terms are not acceptable, return at once unopened.

# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# **CAUTION**

Harmful if inhaled. Avoid breathing dust or spray mist. Remove and wash contaminated clothing before reuse.

FIRST AID		
	Move person to fresh air.	
If Inhaled:	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	
HOT LINE NUMBER		

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

For emergency medical treatment information, call the National Pesticide Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific Time, seven days a week. During other times, call the poison control center at 1-800-222-1222.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
  - · Shoes and socks.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist 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.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

Do not contaminate water when disposing of equipment wash waters or rinsate.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any 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 State or Tribal agency responsible for pesticide regulation.

# PRODUCT INFORMATION

# **GROWTH ENHANCEMENT**

Use ProAct to increase plant health and vigor, suppress nematode egg production, increase root mass and enhance crop quality and production.

#### **USE PRECAUTIONS**

# MIXING WITH OTHER SEED TREATMENT PRODUCTS

Read and follow the entire label of each product to be used in combination with this product. ProAct is believed to be compatible with most other labeled pesticides. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry flowables first, then flowables, and

then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the seed treatment equipment.

#### **USE PROMPTLY**

Use product within 24 hours after it is mixed with water and use opened packages within 3 weeks. Carefully reseal opened packages to minimize exposure to air and moisture.

# MIXING INSTRUCTIONS

Mix ProAct as follows:

- **Step 1.** Mix the required amount of ProAct with water or other water-based materials directly into the mix tank, or initially in a separate container, and provide agitation.
- Step 2. Agitate until dissolved and avoid excessive foaming.
- **Step 3.** When tank mixing, add other materials to the mix tank in the order determined appropriate based on compatibility testing.
- Step 4. Continue to agitate until dissolved and avoid excessive foaming.
- **Step 5.** Promptly apply seed treatment mixture to seed.

## **APPLICATION INSTRUCTIONS**

Apply ProAct commercial seed treatment to seed using application rates specified for the crops listed below. Mix ProAct with other commercial seed treatments, as needed, unless specifically prohibited on labeling of other products in the mixture or if the mixture fails the compatibility jar test. Use of the resulting mix must be in accordance with the most restrictive label limitations and precautions on any of the products in the mixture. Allow treated seeds to dry before bagging.

# **CROPS AND APPLICATION RATES**

**Vegetable and Other Crops** 

Crop	Rate
BULB VEGETABLES CUCURBIT VEGETABLES FRUITING VEGETABLES LEAFY AND COLE VEGETABLES LEGUME VEGETABLES ROOT AND TUBER VEGETABLES SWEET CORN	0.1 – 5 oz per 100 lb seed

### Field Crops

i icia di opo	
Crop	Rate
CORN (Grain, Silage, Seed, or Pop)	
COTTON	
OILSEED CROPS - All crops	0.1 – 5 oz
CEREAL GRAINS - All crops	per 100 lb seed
FORAGE CROPS	·
PEANUT	

#### Tobacco

Crop	Rate
TOBACCO – All Types	0.1 – 5 oz per 100 lb seed

# **Berries and Small Fruit**

Crop	Rate
BERRIES AND SMALL FRUIT – All Types	0.1 – 5 oz per 100 lb seed

# **Trees and Vines**

Crop	Rate
AVOCADO CITRUS	
TREE NUTS	0.1 – 5 oz
POME FRUIT STONE FRUIT	per 100 lb seed
VINE CROPS	per 100 ib seed
TREES (Conifer, Broadleaf)	

# **Turf and Ornamentals**

Crop	Rate
GRASSES – All Types ORNAMENTALS (Bulbs, Seeds or Tubers) – All Types	0.1 – 5 oz per 100 lb seed

**Specialty Crops** 

Crop	Rate
ALOE BANANA COFFEE FIGS HERBS – All Types MANGO PAPAYA PINEAPPLE	0.1 – 5 oz per 100 lb seed

# **Grasses Grown For Seed**

Crop	Rate
TURF GRASSES FORAGE GRASSES	0.1 - 5 oz per 100 lb seed

# [ALTERNATE TEXT:

Rate
2 – 4 oz per 100 lb seed
2 – 4 oz per 100 lb seed
2 – 4 oz per 100 lb seed
0.25 – 1 oz per 100 lb seed
2 – 4 oz per 100 lb seed
2 – 4 oz per 100 lb seed
2 – 4 oz per 100 lb seed
0.75 oz per 100 lb seed
2 – 4 oz per 100 lb seed
0.1 – 1 oz per 100 lb seed
1 – 4 oz per 100 lb seed
0.1 – 1 oz per 100 lb seed
0.1 – 5 oz per 100 lb seed
0.5 oz per 100 lb seed

#### STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Keep product away from exposure to air, sunlight, moisture, or heat. Do not store in temperatures over 110°F for more than 7 days. Use product within 3 weeks of opening and within 24 after mixing.

### PESTICIDE DISPOSAL

Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER HANDLING**

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### WARRANTY AND DISCLAIMER

#### CONDITIONS OF SALE AND EXCLUSIVE WARRANTY

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness of the product, or other unintended consequences may result because of such factors as horticultural practices, use with other products (unless otherwise expressly provided in the Directions for Use of this product), presence of other materials, the manner of use or application, and various environmental conditions, including but not limited to weather conditions and moisture conditions. To the extent consistent with applicable law, all of the aforementioned risks are beyond the control of Plant Health Care, Inc. and the Buyer shall assume all such risks.

#### **EXCLUSIVE WARRANTIES**

Plant Health Care, Inc. warrants that, at the time of first sale of this product, it conforms to the chemical description on this label and, under normal conditions, is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. To the extent consistent with applicable law, if this product does not perform as warranted above, customer's sole remedy for breach of that warranty shall be replacement of the product or refund of the purchase price paid, at the option of Plant Health Care, Inc. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND SATISFACTORY QUALITY.

#### LIMITATION OF LIABILITY

To the extent consistent with applicable law, Plant Health Care, Inc. excludes for itself and its suppliers any liability, whether based in contract or tort (including negligence), for incidental, consequential, indirect, special, or punitive damages of any kind, or for loss of revenue or profits, loss of business, or crop [ALTERNATE TEXT: plant] injury arising out of or in connection with the sale, use, injury, performance, or failure of this product, even if Plant Health Care, Inc. or its authorized reseller has been advised of the possibility of such damages, and limits its liability to replacement of the product or a refund of the purchase price paid, at the option of Plant Health Care, Inc. This disclaimer of liability for damages will not be affected if any remedy provided by this label fails of its essential purpose.

# **ASSUMPTION OF RISK**

To the extent consistent with applicable law, Buyer and User of this product assume the risk of any use contrary to the Directions for Use and/or all of the risks inherent in the use of the product as set forth above. Plant Health Care, Inc. offers this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Exclusive Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Plant Health Care, Inc.

#### PROMPT NOTICE OF CLAIM

Plant Health Care, Inc. must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from the date of application) so that an inspection of the affected property and growing crops may be made. To the extent consistent with applicable law, unless Buyer and User promptly notify Plant Health Care, Inc. of any claims, they shall be barred from obtaining any remedy.

# **TANK MIXES**

To the extent consistent with applicable law, tank mixing or use of this product with any other product, which is not specifically and expressly authorized by this label, shall be the exclusive risk of User, Applicator, and/or Application Advisor. Read and follow the entire label of each product to be used in a tank mix with this product.

# **LIMITED USE LICENSE AND PATENTS**

The contents of this package and/or the use of the contents are covered by U.S. Patent Nos. 5,849,868, 5,859,324, 5,776,889, 5,977,060, and 6,277,814 as well as pending patent applications. The purchase of this package grants the Buyer a license, under these patents and patent applications, to use its contents only for treating plants, plant seeds, and other plant parts as described by this label.

© 2019 Plant Health Care, Inc. [product name] is a registered trademark and the Plant Health Care™ logo is a trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product. Roundup Ready® is a registered trademark of Monsanto Technology LLC.

[BARCODE]

XX.XXXX ProAct US Ag

# Section C. Pre-Plant Seed Treatment

# **ProAct®**

# [ Alternate Brand Names: N-Hibit® Gold HB, INCEPTIVE]

# **Pre-Plant Seed Treatment**

[OPTIONAL TAG LINES – For use individually or in combination on labels: A biochemical pesticide seed treatment that: Improves stand establishment; Suppresses nematode egg production; Enhances crop growth, quality and yield; Yield enhancer; Increases Root Mass; Activates plant growth and defense systems; Plant Health Regulator; Plant Health Promoter; Improves standability; Decreases lodging; Increases plant stamina and vigor; Enhances plant health; Facilitates Integrated Pest Management Programs; Harp-N-Tek<sup>TM</sup> inside [LOGO]; Harp-NTek is Plant Health Care's trademark for its proprietary harpin protein technology.]

## FOR USE ONLY AS SEED TREATMENT IMMEDIATELY PRIOR TO PLANTING

# **Dry Powder**

#### **ACTIVE INGREDIENT:**

 Harpinαβ Protein:
 1.0%

 Other Ingredients
 99.0%

 Total
 100.00%

EPA Reg. No. 71771-3

EPA Est. No. XXXXX-XX-XXX

# **KEEP OUT OF REACH OF CHILDREN**

# CAUTION PRECAUCIÓN

See additional precautionary statements elsewhere on this label.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle (If you do not understand the label, find someone to explain it to you in detail.)

PLANT HEALTH CARE, INC. 242 South Main Street, Suite 216 Holly Springs, NC 27540

1-800-421-9051

www.planthealthcare.com

**NET WEIGHT:** 

Read the entire label before using this product. Read WARRANTY AND DISCLAIMER before buying or using. If terms are not acceptable, return at once unopened.

# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if inhaled. Avoid breathing dust. Remove and wash contaminated clothing before reuse.

FIRST AID	
If Inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
HOT I INE NUMBED	

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical treatment information, call the National Pesticide Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific Time, seven days a week. During other times, call the poison control center at 1-800-222-1222.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes and socks.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist 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.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into 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 when disposing of equipment wash waters or rinsate.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any 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 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) and restricted-entry interval. The requirements in this box 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.

**Exception:** If the product is soil injected or 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; and
- Shoes and socks.

### PRODUCT INFORMATION

ProAct stimulates the plant's natural growth and defense systems, enhancing overall plant health. Healthier plants exhibit increased plant stamina and vigor, leading to one or more of the following benefits: improved stand and root establishment, suppressed nematode egg production, increased marketable yield, and enhanced quality. ProAct works best when used in conjunction with good crop management practices.

### **GROWTH ENHANCEMENT AND MARKETABLE YIELD**

Use ProAct to increase plant health and vigor, to assist in the management of certain diseases, to suppress nematode egg production, to improve stand and root establishment, and to enhance crop quality and marketable production.

### **SITES**

Use ProAct as a pre-plant seed treatment in greenhouses, shadehouses, and nurseries or for field production of all crops listed on this label.

# **USE PRECAUTIONS**

#### **USE PROMPTLY**

Use product promptly to minimize absorption of water. Carefully reseal opened packages to minimize exposure to air and moisture. Use opened packages within 3 weeks.

#### **MIXING**

Use ProAct in addition to other dry commercial seed treatments and in conjunction with other dry hopper box treatments. Apply ProAct only to dry seed. Do not mix ProAct with water. Check with your local Plant Health Care representative for specific compatibility information for ProAct and other labeled products.

#### **USE OF TREATED SEED**

Treat only seeds needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seed beyond planting time.

# APPLICATION INSTRUCTIONS FOR N-Hibit® Gold HB

Apply ProAct as a dry pre-plant seed treatment. Apply product to dry seed using standard seed treatment equipment or apply directly to the hopper box. When applying directly to the hopper box, fill half the hopper box with seed and sprinkle the appropriate half-rate of ProAct over seed. See the appropriate application rates under CROPS and APPLICATION RATES. Finish filling the hopper box with seed and sprinkle the remaining ProAct over the new seed.

# CROPS AND APPLICATION RATES FOR N-Hibit® Gold HB

**Vegetable and Other Crops** 

Crop	Rate
FRUITING VEGETABLES LEAFY AND COLE VEGETABLES LEGUME VEGETABLES CUCURBIT VEGETABLES ROOT AND TUBER VEGETABLES ONION GARLIC SCALLION SWEET CORN	0.1 – 5 oz per 100 lb seed

# Field Crops

Crop	Rate
COTTON	
FORAGE CROPS	
CORN (Grain, Silage, Seed, or Pop)	0.1 – 5 oz
OILSEED CROPS – All crops	per 100 lb seed
CEREAL GRAINS – All crops	per 100 ib seed
SUGARCANE	

# Tobacco

Сгор	Rate
TOBACCO – All Types	0.1 – 5 oz per 100 lb seed

# **Berries and Small Fruit**

Crop	Rate
BERRIES AND SMALL FRUIT – All Types	0.1 – 5 oz per 100 lb seed

# **Trees and Vines**

Crop	Rate
AVOCADO	
CITRUS	
TREE NUTS	0.1 – 5 oz
POME FRUIT (Apple, Pear)	0.1 – 5 02
STONE FRUIT	per 100 lb seed
VINE CROPS	·
TREES (Conifer, Broadleaf)	

# **Turf and Ornamentals**

Crop	Rate
GRASSES – All Types ORNAMENTALS (Bulbs, Seeds or Tubers) – All Types	0.1 - 5 oz per 100 lb seed

**Specialty Crops** 

Crop	Rate
ALOE BANANA COFFEE FIGS HERBS - All Types MANGO PAPAYA PINEAPPLE	0.1 – 5 oz per 100 lb seed

# **Grasses Grown For Seed**

Crop	Rate
TURF GRASSES	0.1 – 5 oz
FORAGE GRASSES	per 100 lb seed

# **APPLICATION INSTRUCTIONS FOR INCEPTIVE**

Inceptive is designed to be mixed with talc or talc/graphite (mixture) seed lubricant and applied to crop seed. When mixing Inceptive for use in Corn, Soybean, Cotton or sugar beet add one full container of Inceptive (20 oz.) to 20 lbs. of a talc or talc/graphite (mixture) seed lubricant. For nematode suppression in cotton, add two to three full containers of Inceptive (20 oz.) to 20 lbs. of a talc or talc/graphite seed lubricant. Mix or shake thoroughly before applying to seed in the planter hopper box.

# **CROPS AND APPLICATION RATES FIELD CROPS**

Crop	Rate
CORN (Grain Silage, Seed, or Pop)	.04 oz. per acre or 20 oz. per 210 units of seed corn (approx. 525 acre)
SOYBEANS	0.1 oz. per acre or 20 oz. per 210 units of soybean seed (approx. 210 acres.)
COTTON	0.04 oz. per acre/20 oz. per 70 units of cotton seed (approx. 490 acres). For nematode suppression: 0.08 oz. to 0.12 oz. per acre/40 to 60 oz. per 490 acres
SUGAR BEET	0.08 oz. per acre or 20 oz. per 160 units of Sugar beet seed. (approx. 250 acres)  to 0.16 oz. per acre or 40 oz. per 160 units of Sugar beet seed. (approx. 250 acres)

#### STORAGE AND DISPOSAL

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

# **PESTICIDE STORAGE**

Keep product away from exposure to air, sunlight, moisture, or heat.

Do not store in temperatures over 110°F for more than 7 days.

Use product within 3 weeks of opening and the same day as mixing.

### **PESTICIDE DISPOSAL**

Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER HANDLING**

[PLASTIC/PAPER BAG:] [Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]

[METAL CONTAINER;] [Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.]

#### WARRANTY AND DISCLAIMER

#### CONDITIONS OF SALE AND EXCLUSIVE WARRANTY

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness of the product, or other unintended consequences may result because of such factors as horticultural practices, use with other products (unless otherwise expressly provided in the Directions for Use of this product), presence of other materials, the manner of use or application, and various environmental conditions, including but not limited to weather conditions and moisture conditions. To the extent consistent with applicable law, all of the aforementioned risks are beyond the control of Plant Health Care, Inc. and the Buyer shall assume all such risks.

#### **EXCLUSIVE WARRANTIES**

Plant Health Care, Inc. warrants that, at the time of first sale of this product, it conforms to the chemical description on this label and, under normal conditions, is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. To the extent consistent with applicable law, if this product does not perform as warranted above, customer's sole remedy for breach of that warranty shall be replacement of the product or refund of the purchase price paid, at the option of Plant Health Care, Inc. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND SATISFACTORY QUALITY.

#### LIMITATION OF LIABILITY

To the extent consistent with applicable law, Plant Health Care, Inc. excludes for itself and its suppliers any liability, whether based in contract or tort (including negligence), for incidental, consequential, indirect, special, or punitive damages of any kind, or for loss of revenue or profits, loss of business, or crop injury arising out of or in connection with the sale, use, injury, performance, or failure of this product, even if Plant Health Care, Inc. or its authorized reseller has been advised of the possibility of such damages, and limits its liability to replacement of the product or a refund of the purchase price paid, at the option of Plant Health Care, Inc. This disclaimer of liability for damages will not be affected if any remedy provided by this label fails of its essential purpose.

### **ASSUMPTION OF RISK**

To the extent consistent with applicable law, Buyer and User of this product assume the risk of any use contrary to the Directions for Use and/or all of the risks inherent in the use of the product as set forth above. Plant Health Care, Inc. offers this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Exclusive Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Plant Health Care, Inc.

# PROMPT NOTICE OF CLAIM

Plant Health Care, Inc. must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from the date of application) so that an inspection of the affected property and growing crops may be made. To the extent consistent with applicable law, unless Buyer and User promptly notify Plant Health Care, Inc. of any claims, they shall be barred from obtaining any remedy.

#### **TANK MIXES**

To the extent consistent with applicable law, tank mixing or use of this product with any other product, which is not specifically and expressly authorized by this label, shall be the exclusive risk of User, Applicator, and/or Application Advisor. Read and follow the entire label of each product to be used in a tank mix with this product.

#### LIMITED USE LICENSE AND PATENTS

The contents of this package and/or the use of the contents are covered by U.S. Patent Nos. 5,849,868, 5,859,324, 5,776,889, 5,977,060, and 6,277,814 as well as pending patent applications. The purchase of this package grants the Buyer a license, under these patents and patent applications, to use its contents only for treating plants, plant seeds, and other plant parts as described by this label.

© 2019 Plant Health Care, Inc. [product name is a registered trademark and the Plant Health Care™ logo is a trademark of Plant Health Care, Inc.] [INCEPTIVE is a registered trademark of Talc USA.] Always read and follow label instructions before buying or using this product. Roundup Ready® is a registered trademark of Monsanto Technology LLC.

[BARCODE]

XX.XXXX ProAct US Ag	

# Section D. Residential (Home & Garden) Use

# **ProAct®**

[ Alternate Brand Names: Messenger® Gold]

# **Pre-Plant Seed Treatment**

[OPTIONAL TAG LINES – For use individually or in combination on labels and/or accompanying materials: For Home & Garden Use; Home, Yard & Garden; A Biochemical Plant Activator For Healthier Plants; Promotes Plant Growth; Concentrate; Helps Manage Disease For Home and Garden Use; For Healthier Plants; Healthier Plants; Better Blooms; Larger Harvests; Plant Health Regulator; Plant Health Promoter; Growth Stimulator; Easy to Use; Broad Spectrum; Promotes Plant Growth for Superior Gardens; Breakthrough Technology; Revolutionary; Effective; Economical; For Use in Water Gardens and Ornamental Ponds; Delivering stronger and healthier plants; Increases root mass; Improves the health of every plant you grow! Improves the health of every plant in your garden! Improves the health of every plant you grow in your Garden! Fruits ● Garden Flowers & Shrubs ● House Plants ● Vegetables; Boost overall growth and production; Improve plant stamina & vigor; Strengthen a plant's resistance to disease; Mix and Spray, or Simply Mix and Spray, or Mix and Spray Every Three Weeks, or Simply Mix and Spray Every Three Weeks; Harp-N-Tek<sup>™</sup> inside [LOGO]; Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology.]

### **ACTIVE INGREDIENT:**

Harpinαβ Protein:	1.0%
Other Ingredients	99.0%
Total	100.00%

EPA Reg. No. 71771-3 EPA Est. No. XXXXX-XXX

### KEEP OUT OF REACH OF CHILDREN

# CAUTION PRECAUCIÓN

See back panel for additional precautionary statements.

[OPTIONAL – Packed for:]
PLANT HEALTH CARE, INC.
242 South Main Street, Suite 216
Holly Springs, NC 27540

1-800-421-9051

www.planthealthcare.com

**NET WEIGHT:** 

# **DIRECTIONS FOR USE**

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

Harpinαβ, the active ingredient in ProAct, is derived from naturally occurring harpin proteins. ProAct stimulates the plant's natural growth and defense systems, enhancing overall plant health. Use ProAct to boost overall plant growth, vigor, and production, and to aid in the management of disease.

Use ProAct on all plants grown indoors and outdoors, including Roses and other Flowers, Vegetables, Fruiting Trees, Berries, Vines, Herbs, Floating and Emergent Aquatic Plants in Water Gardens and Ornamental Ponds, and all Ornamental Plants such as Trees, Shrubs, and Turf.

# **Mixing and Application Instructions**

- 1. Add one packet to 3 gallons of water [ALTERNATE LANGUAGE FOR SMALL PACKET: Add one packet to 1 gallon of water] (1/4 teaspoon per quart of water) and mix thoroughly.
- 2. Apply mixed product to plant foliage with a pump sprayer, mister, watering can, or other suitable applicator. Apply as a fine mist for most efficient coverage.
- 3. Apply when plants are actively growing. For best results, continue applications every 3 weeks through harvest, until first frost, or until plants become dormant.
- 4. Apply product the same day it is mixed. Re-apply if it rains within 30 minutes of application.
- 5. Carefully reseal opened packets to minimize exposure to air and moisture. Use opened packets within 3 weeks.

#### STORAGE AND DISPOSAL

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

### **PESTICIDE STORAGE**

Store dry and out of direct sunlight. Do not store in temperatures over 110°F for more than 7 days.

# PESTICIDE DISPOSAL AND CONTAINER HANDLING

Nonrefillable container. Do not reuse or refill this container.

#### If empty:

Place in trash or offer for recycling if available.

#### If partly filled:

Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if inhaled. Avoid breathing dust or spray mist. Remove and wash contaminated clothing before reuse. People and pets may enter treated areas after spray has dried.

FIRST AID	
If Inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>

# **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical treatment information, call the National Pesticide Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific Time, seven days a week. During other times, call the poison control center at 1-800-222-1222.

# **ENVIRONMENTAL HAZARDS**

To protect the environment, do not allow pesticide to enter or runoff into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind and rain does not blow or wash pesticide off the treatment area. Sweeping any product that lands on a driveway, sidewalk, or street back onto the treated area of the lawn or garden will help prevent runoff to water bodies or drainage systems.

NOTICE: To the extent consistent with applicable law, buyer assumes all responsibility for safety and use not in accordance with label directions.

The contents of this package and/or the use of the contents are protected by U.S. Patent Nos. 5,849,868, 5,859,324, 5,776,889, 5,977,060, and 6,277,814. REFORMULATION OR REPACKAGING FOR SALE IS PROHIBITED.

© 2019 Plant Health Care, Inc. [product name] is a registered trademark and the Plant Health Care™ logo is a trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product.

# [ALTERNATE LOCATION for Address/Phone/Website]

[OPTIONAL – Packed for:] Plant Health Care, Inc., 2626 Glenwood Avenue, Suite 350, Raleigh, NC 27608.

# **OPTIONAL LANGUAGE** for labels and accompanying materials:

CAN BE USED UP TO THE DAY OF HARVEST

#### What does ProAct do?

- Stimulates a plant's defense and growth mechanisms
- Boosts overall growth, vigor, and production
- Aids in the management of disease
- Improves the plant's ability to grow and protect itself from stresses caused by adverse environmental Conditions

[BARCODE]

XX.XXXX ProAct US H&G

# Section E. Bulk Product for Re-packaging or Formulating Use Only

# **ProAct®**

# A Biochemical Pesticide – For Re-packaging or Formulating Use Only

# Wettable Dry Granule

**ACTIVE INGREDIENT:** 

 Harpinαβ Protein:
 1.0%

 Other Ingredients
 99.0%

 Total
 100.00%

EPA Reg. No. 71771-3 EPA Est. No. XXXXX-XXX

# **KEEP OUT OF REACH OF CHILDREN**

# CAUTION PRECAUCIÓN

See additional precautionary statements elsewhere on this label.

[OPTIONAL – Manufactured for:]

PLANT HEALTH CARE, INC. 242 South Main Street, Suite 216 Holly Springs, NC 27540

1-800-421-9051

www.planthealthcare.com

**NET WEIGHT:** 

[OPTIONAL -Batch Number: Manufacturing Date: Expiration Date:]

# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if inhaled. Avoid breathing dust or spray mist. Remove and wash contaminated clothing before reuse.

<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	FIRST AID	
If Inhaled: preferably mouth-to-mouth if possible.		Move person to fresh air.
	If Inhaled:	preferably mouth-to-mouth if possible.

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

For emergency medical treatment information, call the National Pesticide Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific Time, seven days a week. During other times, call the poison control center at 1-800-222-1222.

### **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 when disposing of equipment wash waters or rinsate.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For repackaging only or formulating use only.

# STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Keep product away from exposure to air, sunlight, moisture, or heat. Do not store in temperatures over 110°F for more than 7 days.

#### **PESTICIDE DISPOSAL**

Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER HANDLING**

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[BARCODE]

XX.XXXX ProAct US Bulk