

## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

September 16, 2024

Pam McGee Regulatory Affairs Specialist II Novozymes North America, Inc. An affiliate of Novozymes Biologicals, Inc. 5400 Corporate Circle Salem, VA 24153

Subject: PRIA (Pesticide Registration Improvement Act) Labeling and Formulation Amendment –

Add an Alternate Manufacturing Process, Add an Alternate Production Site, and Make

Updates the to the Label Requested by EPA

Product Name: TAEGRO 2

EPA Registration Number: 70127-12 EPA Receipt Date: 03/22/2024 Action Case Number: 00559343

#### Dear Pam McGee:

The amended labeling and Confidential Statement of Formula (CSF) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, are acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

Please note that the record for this product currently contains the following acceptable CSF:

Basic CSF dated 09/12/2024

Any CSFs other than that listed above are superseded/no longer valid.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 § CFR 152.3.

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 the U.S. Environmental Protection Agency. 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

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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.

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.

If you have any questions, please contact Andrew Queen by phone at 202-566-1539 or via email at queen.andrew@epa.gov.

Sincerely,

Digitally signed by Algandra Bouledes Alexandra Boukedes

18:00:13 -04'00'

Alexandra Boukedes, Product Manager 92 Microbial Pesticides Branch **Biopesticides and Pollution** Prevention Division (7511M) Office of Pesticide Programs

**Enclosure** 

{ } – Denotes comments to the reviewer

[] – Denotes optional statements and/or images.

{This label reflects the unit package labeling}

{Note: The following information will be presented as a booklet on the front of the product container. Page 1 and 2 are the primary display panel of the booklet.}

## TAEGRO® 2

[Fungicide][For Suppression of Certain Diseases]

[TAEGRO 2 is a bacterial based biofungicide/bactericide used for suppressing selected soilborne and foliar diseases on agricultural [[and ornamental] [and other]] crops]] [For Plant Strengthening, Growth Enhancement and Suppression of Certain Diseases]

ACTIVE INGREDIENT	% w/w
Bacillus subtilis var. amyloliquefaciens Strain FZB24*	. 10.4%
OTHER INGREDIENTS	<u>89.6%</u>
Total	.100.0%

<sup>\*</sup>Contains a minimum of 1.0 x 10<sup>10</sup> Colony Forming Units [(CFU)]/gram of product.

## KEEP OUT OF REACH OF CHILDREN

# CAUTION

See inside this booklet for [additional] [Precautionary Statements,] [and] [First Aid,] [and] complete Directions for Use, and Warranty.

Net contents: [8.8 ounces (250 gm); or 13.2 oz (375 gm); or 1 pound (lb.) 10.5 oz (750 gm)]

Novozymes Biologicals, Inc. 5400 Corporate Circle • Salem, VA 24153 1-888-744-5662

EPA Reg. No. 70127-12 EPA Est. No. [EPA Establishment No.] Made in the USA

[NOVOZYMES RETHINK TOMORROW] [LOGO]

ACCEPTED

Sep 16, 2024

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

70127-12

Batch Code and Expiration Date: [Batch code and expiration date to be inserted]

# PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION** - Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Harmful if absorbed through skin, inhaled or swallowed. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

	FIRST AID
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
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 by mouth-to-mouth, if possible.</li> </ul>
IF SWALLOWED:	<ul> <li>Call a Poison Control Center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</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 general information on this product contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST. You may also contact 1-800-222-1222 for emergency medical treatment information.

[Note: The following information represents the beginning of the inside pages of the booklet attached to the front of the product container]

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes
- Socks
- Waterproof gloves
- Protective eyewear

Mixer/loaders and applicators must wear and use a NIOSH-approved particulate respirator with any N, R, or P filter with NIOSH approval number prefix TC-84A (if tank mixing with any oil-based adjuvants, spreaders, or spreader/stickers, use only R or P filters); or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

## **ENGINEERING CONTROLS**

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.670(d-f)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

#### **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**

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 cleaning equipment or disposing of equipment washwater or rinsate.

## PHYSICAL OR CHEMICAL HAZARDS

For spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the 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 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.

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

For early entry into 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, wear:

- Coveralls worn over short-sleeved shirt and short pants
- Socks
- Shoes
- Waterproof gloves
- Protective eyewear

## NON-AGRICULUTURAL USE REQUIREMENTS

The requirements in this box apply to uses 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

TAEGRO 2 is a bacterial based biofungicide/bactericide used for suppressing selected soil-borne and foliar diseases on agricultural [[and ornamental] [and other]] crops as listed on the following pages.

TAEGRO 2 is most effective in low to medium disease pressure situations and should be applied prior to disease or at disease establishment so suppression action is maximized.

#### MIXING INSTRUCTIONS

TAEGRO 2 must be pre-mixed thoroughly with water to assure a properly distributed suspension. The required amount of Taegro 2 should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of Taegro 2 in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations. The addition of a non-ionic surfactant is recommended. If mix water pH is less than 5 or greater than 8, pH adjustment and buffering may improve suspension. Apply content of entire suspension within 1-3 hours of mixing to ensure viability of TAEGRO 2.

#### COMPATIBILITY

TAEGRO 2 is compatible with many commonly used plant protection products and fertilizers, but has not been evaluated with all potential combinations of products that might be in tank mixes. To ensure compatibility, conduct a jar test by mixing proportionally scaled down quantities of the desired tank mix components in proportional amount of water. Add wettable powders first (the addition of a non-ionic surfactant is recommended at this point), followed by water dispersible granules, then by liquid flowables and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the mix stays in solution or re-suspends, it is physically compatible. If possible, spray the jar mix on a small section of crop to confirm crop safety of the mix.

Follow the most restrictive of the labeling limitations and precautions of all products used in mixtures. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

## **APPLICATION INSTRUCTIONS**

Apply TAEGRO 2 as early as possible in the life cycle of the plant to enhance disease protection. Apply TAEGRO 2 to plants according to use patterns by disease, crop and disease pressure as needed for up to 12 applications per season. For best results, initiate TAEGRO 2 applications prior to disease establishment while the disease pressure is low to medium. When diseases reach medium to high pressure, TAEGRO 2 is most effective in tank mixes or rotations with other fungicides and as an excellent resistance management tool.

**FOLIAR APPLICATIONS:** TAEGRO 2 should be applied in an application volume that provides adequate coverage and placement for optimum crop protection and disease prevention. Application rates of 2.6 to 5.2 oz per acre in 20-50 gallons per acre should be used for low biomass crops to provide optimum coverage. **Disease control applications for larger crop and soil drench applications that are made with the application rate per volume cannot exceed the total labeled application rate per area for that use pattern.** Higher spray volume will generally result in better coverage and better disease control. Lack of control when using below minimum spray volumes is solely at the risk of the applicator/user.

**TRANSPLANTS, INCLUDING PLUGS:** Apply TAEGRO 2 to transplants by dipping or drenching, making sure the root system is thoroughly soaked. For dipping, follow the instructions for "Cutting and Root Dips" before planting transplants into soil medium. For drenching, first plant the transplants into soil medium and then follow instructions for "Drenching." In greenhouse production apply TAEGRO 2 to newly sown transplants.

**DRENCHING:** Apply TAEGRO 2 to seedlings or newly rooted cuttings. Drench soil around plants with the TAEGRO 2 suspension making sure TAEGRO 2 is thoroughly drenched into the root zone.

Mix and Apply TAEGRO 2 as follows:

- Per 100 gallons of water [By weight] use 2.6 5.2 oz (75-150 grams) of TAEGRO 2; [By volume,] use 3.5-7.0 fluid ounces of TAEGRO 2
- Per 1 gallon of water [By weight] use 0.05 oz (1.5 grams) of TAEGRO 2.

**CUTTING AND ROOT DIPS:** Stir suspension for several minutes to ensure complete mixture and to eliminate clumps. Place rootstock in the suspension for five to ten minutes allowing time for TAEGRO 2 to penetrate the root zone. For ornamentals, apply at least one followup drench treatment two to three weeks following initial treatment.

Mix and Apply TAEGRO 2 as follows:

• Per 1 gallon of water – [By weight] use 0.28 oz (8 grams) of TAEGRO 2; [By volume,] use 2 teaspoons of TAEGRO 2.

**SEED TREATMENTS:** Using the table below. Apply the specified amount of TAEGRO 2 into specified amount of water and apply to the seed per your usual seed treatment method.

Seed	TAEGRO	TAEGRO 2/seed		/seed
	oz TAEGRO 2	g TAEGRO 2	oz water	fluid ml water
	/lb seed	/kg seed	/lb seed	/kg seed
Beet	0.54	15.30	0.47	30.6
Canola	0.96	27.25	0.84	54.5
Corn	0.40	11.34	0.58	37.8
Cotton	0.67	18.90	0.58	37.8
Cucumber	0.96	27.25	0.84	54.5
Garden Bean	0.05	1.40	0.09	5.6
Lettuce –	0.93	26.45	0.81	52.9
Pelletized				
Lettuce –	0.58	16.45	0.50	32.9
Unpelletized				
Onion	1.44	40.90	1.25	81.8
Pepper	0.96	27.25	0.84	54.5
Soy	0.06	1.55	0.12	7.75
Tomato	1.44	40.90	1.25	81.8
Wheat	0.07	1.92	0.10	6.4

Do not use treated seed for food or feed purposes or process for oil. Treat only those seeds needed for immediate use, minimizing the interval between treatments and planting. Do not store excess treated seeds beyond planting time.

**SOIL INCORPORATION** Mix TAEGRO 2 into soil or soilless growing media at a rate of 8.8 oz. (250 grams) per cubic yard. Thoroughly mix media, using mechanical mixing equipment, to ensure a uniform distribution of product. Incorporated into soil, TAEGRO 2 can be raked into growing beds prior to planting.

**HYDROPONICS** Prepare a stock solution by adding 1 gram (¼ teaspoon) of TAEGRO 2, for every 50 feet of irrigation tubing, in one gallon of water. Stir product for several minutes to ensure complete suspension. Add solution to circulating water system and allow to go through three to five watering cycles before clearing the system. For best results, make two or three applications spaced one week apart.

**INTERIORSCAPES:** Before application, thoroughly moisten root zone with water. Mix 1 gram of TAEGRO 2 per 1 liter of water (or ¾ teaspoon of TAEGRO 2 per gallon of water). Stir solution for several minutes to ensure complete suspension. Drench solution onto root zone to ensure coverage to all roots. TAEGRO 2 performs best when applied to seedlings or young plants. For best results, make two or three applications spaced one week apart.

**ORCHIDS AND FERNS:** For potted orchids and ferns, follow directions for drenching. For orchids and ferns with exposed roots, prepare 4 grams of TAEGRO 2 in 1 liter of water (or 3 teaspoons of TAEGRO 2 per gallon of water.) Pour solution into spray container (or squirt bottle) and spray roots to point of drip. TAEGRO 2 performs best when applied to seedlings or young plants. For best results, make two or three applications spaced one week apart.

**TUBERS, BULBS AND CORMS:** Mix 4 grams of TAEGRO 2 in 1 liter of water (or 3 teaspoons of TAEGRO 2 per gallon of water). Stir solution for several minutes to ensure complete suspension. Dip tubers (or bulbs, etc.) for 10 to 30 minutes before planting. For best results, make two or three applications spaced one week apart.

**TURF:** As an overhead spray, mix 75 grams of TAEGRO 2 in 100 gallons of water. Before applying, stir product for several minutes to ensure complete suspension. Apply suspension with a conventional sprayer using 50 gallons to 100 gallons of water per acre. Water-in TAEGRO 2 immediately after application with a minimum of 1/10 inch of water. For best results, make two or three applications spaced one week apart.

#### CHEMIGATION

## **General Requirements**

Apply this product through overhead sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; flood (basin); furrow; border or drip (buried or surface placed) irrigation systems. Do not apply this product through any other type of irrigation system.

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

A good source for answers if you have questions about calibration is your local State Cooperative Extension Service specialists, equipment manufacturers or university calibration guides.

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 responsible person, shall shut the system down and make necessary adjustments should the need arise.

## General Instructions for Use of TAEGRO 2 in Chemigation

Mixing and Application Instructions: A pesticide supply tank is recommended. Fill supply tank with water to approximately one-half of the desired volume and add TAEGRO 2, mixing while pouring in TAEGRO 2. Fill the supply tank to the desired volume. Continuous agitation of TAEGRO 2 in the supply tank is required to achieve optimum coverage and crop protection.

Mix 2.6-5.2 oz (75-150 grams) of TAEGRO 2 per 20-100 gallons of water in a chemigation nurse tank. Agitation is required in the nurse tank to maintain adequate suspension of Taegro 2 during application. Mechanical agitation is preferred for larger nurse or reservoir tanks that require longer periods of time for application to larger areas or for more concentrated tanks using lower volumes of water. For foliar diseases, apply no more than 0.1-0.25 inches of water per acre as excess chemigation may decrease efficacy. If target disease is in the soil, use 0.25-0.5 inches of water per acre in order to move product into the soil profile, but additional irrigation volumes may be required for optimum coverage depending on soil texture and soil moisture levels at the time of application

**Compatibility:** TAEGRO 2 is compatible with many commonly used plant protection products and fertilizers, but has not been evaluated with all potential combinations of If TAEGRO 2 is applied in combination with other pesticides, determine compatibility prior to application through the irrigation system. To ensure compatibility. conduct a jar test by mixing proportionally scaled down quantities of the desired irrigation components in proportional amount of water. Add wettable powders first (the addition of a non-ionic surfactant is recommended at this point), followed by water dispersible granules, then by liquid flowables and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least ten (10) minutes. If the mix stays in solution or re-suspends, it is physically compatible. If possible, spray the jar mix on a small section of crop to confirm crop safety of the mix. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Test the combination on a small portion of the crop to be treated to ensure that a phyto-toxic response will not occur as a result of application.

# Requirements for Chemigation Systems Connected to Public Water Systems

- 1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regular serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), back flow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the 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.
- 3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.

- 4) The pesticide injection pipeline must contain a functional, normally closed, solenoidoperated 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.
- 5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) 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.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

## **Requirements for Sprinkler Chemigation**

- 1) 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.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) 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.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) 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.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

## Requirements for Flood (Basin), Furrow and Border Chemigation

- Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.
- 2) Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - a. 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.
  - b. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.

- c. 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.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. 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.

## Requirements for Drip (Trickle) Chemigation

- 1) 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.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) 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.
- 4) The system must contain functional inter-locking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) 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.

# **USE RECOMMENDATIONS:**

Crop	Diseases	Rate (Oz/Acre)	Use Recommendations
Vegetables: (Crop Group 4)  Head/Leaf Lettuce Celery Spinach Radicchio Endive Arugula Parsley Rhubarb Swiss Chard and other leafy vegetables	For soil-borne disease [suppression][control] of:  Rhizoctonia Fusarium Sclerotinia	2.6 - 5.2 oz	<ul> <li>For Rhizoctonia and Fusiarium control, apply at planting (seeded or transplanted) or immediately following through overhead sprinkler, drip injection (surface or buried), in furrow soil spray or with liquid fertilizer at planting.</li> <li>For sequential applications using overheads, sprinkler, basal sprays or drip injection apply every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>For Sclerotinia, the first application should be made at planting applied in-furrow or through drip irrigation (buried or surface) to make sure the application to the root zone. Sequential applications should initiate at lettuce thinning and continuing every 7-14 days depending on disease pressure.</li> <li>For optimum control of S. minor, Taegro 2 should be applied to the root zone</li> <li>A combination of applications for S. sclerotiorum control should be drip, soil surface applications and foliar applications at infestation sites (dead or dying tissue) for optimum control.</li> <li>Fields with historical disease problems may require a higher rate, more applications, and shorter application intervals for better efficacy.</li> </ul>

For foliar [suppression][control]I of:  Downy Mildew Powdery mildew White rust Bacterial blight	2.6 – 5.2 oz	<ul> <li>Start applications prior to disease or at disease establishment. Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides.</li> <li>Apply enough spray solution for thorough coverage.</li> <li>The addition of a non-ionic surfactant may improve disease control.</li> </ul>
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[Crops in Leafy Vegetables (Crop Group 4): Amaranth (Chinese spinach); arugula (roquette); cardoon; celery; celery, Chinese; celtuce; chervil; chrysanthemum, edible-leaved; chrysanthemum, garland; corn salad; cress, garden; cress, upland; dandelion; dock (sorrel); endive (escarole); fennel, Florence; lettuce, head and leaf; orach; parsley; purslane, garden; purslane, winter; radicchio (red chicory); rhubarb; spinach; spinach, New Zealand; spinach, vine; Swiss chard; cultivars, varieties and/or hybrids of these.]

Fruiting Vegetables: (Crop Group 8)  Tomato Peppers and other fruiting vegetables	Seedling diseases caused by:  Rhizoctonia Fusarium Phythophthora Pythium  For [suppression][control] of:  Phytophthora blight (P. capsici)	2.6 - 5.2 oz	<ul> <li>For soil disease control applications, apply as drench on transplants prior to planting.</li> <li>Apply w/liquid fertilizer or as an in furrow soil spray or drip irrigation injection (surface or buried) at or immediately following planting.</li> <li>Follow with drip injection or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>Fields with historical Rhizoctonia, Fusarium, Phytophthora and Pythium problems may require more applications and shorter frequency for better efficacy.</li> </ul>
	For foliar [suppression][control] of:  Powdery Mildew Early Blight Late Blight Bacterial Speck — (Pseudomonas spp) Bacterial Spot — (Xanthomonas spp.)	2.6 – 5.2 oz	<ul> <li>Start foliar disease control applications prior to disease or at disease establishment. Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides.         Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.     </li> <li>Apply enough spray solution for thorough coverage.</li> <li>The addition of a non-ionic surfactant may improve disease control.</li> </ul>

[Crops in Fruiting Vegetables (Crop Group 8): African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; pepper, bell; pepper, nonbell; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.]

Cucurbit Vegetables: (Crop Group 9)  Cantaloupe Honey Dew Cucumber Squash Watermelon and other cucurbits	Seedling diseases caused by:  Rhizoctonia Fusarium Phythophthora Pythium  For [suppression][control]of:  Phytophthora blight (P. capsici)	2.6 - 5.2 oz	<ul> <li>For soil disease control, apply as drench on transplants prior to planting.</li> <li>Apply at planting or immediately following planting as an in furrow soil spray, drip irrigation (buried or surface) or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>Fields with historical Rhizoctonia, Fusarium, Phytophthora and Pythium problems may require more applications and shorter frequency for better efficacy.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
	For foliar [suppression][control] of:  Powdery Mildew Gummy stem blight	2.6 - 5.2 oz	<ul> <li>For foliar disease control, start applications prior to disease or at disease establishment.</li> <li>Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
[Crops in Cucurbits (Crop Group 9): Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); <i>Momordica</i> spp (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter			

(includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon; cultivars, varieties and/or hybrids of these.]

Fusarium Phythophthora			thoroughly soak the root zone in growing media.
	2.6 – 5.2 oz	•	9

Brassica Vegetables: (Crop Group 5)  Broccoli Brussels sprouts Cabbage Cauliflower Collards Kale Mustard greens (all crops in head/steam and leafy greens subgroups)	For [suppression][control] of seedling diseases caused by: Rhizoctonia Pythium	2.6 – 5.2 oz	<ul> <li>For soil disease control, apply as drench on transplants prior to planting.</li> <li>Apply at planting or immediately following planting as an in furrow soil spray, drip irrigation (buried or surface) or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>Fields with historical Rhizoctonia and Pythium problems may require more applications and shorter frequency for better efficacy.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
	For foliar [suppression][control] of:  Downy mildew Alternaria Powdery mildew Xanthomonas leafspot	2.6 – 5.2 oz	<ul> <li>For foliar disease control, start applications prior to disease or at disease establishment. Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>

[Crops in Brassica Vegetables (Crop Group 5): Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard(gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustard greens; mustard spinach; rape greens; cultivars, varieties and/or hybrids of these.]

Bulb Vegetables: (Crop Group 3)  Onion, bulb Onion, green Garlic Shallot Leeks and other bulb vegetables	For [suppression][control]of seedling diseases caused by: Rhizoctonia Pythium	2.6 – 5.2 oz	<ul> <li>For soil disease control, apply as drench on transplants prior to planting.</li> <li>Apply at planting or immediately following planting as an in furrow soil spray, drip irrigation (surface or buried) or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>Fields with historical Rhizoctonia and Pythium problems may require more applications and shorter frequency for better efficacy.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
	For foliar [suppression][control]of:  Downy Mildew Botrytis Alternaria Powdery mildew	2.6 – 5.2 oz	<ul> <li>For foliar disease control, start applications prior to disease or at disease establishment.         Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides         </li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>

[Bulb Vegetables (Crop Group 3-07): Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.]

Legume Vegetables: (Crop Groups 6 and 7)  (dried and succulent and includes foliage of legume group)  Beans Peas and other legume vegetables	For [suppression][control]of seedling diseases caused by: Rhizoctonia Pythium  For [suppression][control]of: Sclerotinia blight (S. sclerotiorum)	2.6 - 5.2 oz	<ul> <li>For seedling diseases, apply at planting or immediately following planting as an in furrow soil spray, drip irrigation (surface or buried) or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>Fields with historical Rhizoctonia and Pythium problems may require more applications and shorter frequency for better efficacy.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> <li>For suppression of Sclerotinia blight, apply as a foliar spray at 10% flowering. Follow with sequential applications to provide protection of dead or dying tissue prior to Sclerotinia establishment</li> </ul>
Soybeans	Pythium Rhizoctonia Phytophthora  For [suppression][control] of:  White mold (Sclerotinia)		<ul> <li>For seedling diseases, apply at planting or immediately following planting as an in furrow soil spray or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>For suppression of Sclerotinia, apply at 10% flowering. Follow with sequential applications to provide protection of dead or dying tissue prior to Sclerotinia establishment</li> <li>A combination of applications for Sclerotinia control should be drip, soil surface applications and foliar applications at infestation sites (dead or dying tissue) for optimum control.</li> </ul>

- Fields with historical disease problems may require a higher rate, more applications, and shorter application intervals for better efficacy.
- Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.

[Legume Vegetables (Crop Groups 6 and 7): Bean ( Lupinus ) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean ( Phaseolus ) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean ( Vigna ) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava); chickpea (garbanzo); guar; jackbean; lablab bean; lentil; pea ( Pisum ) (includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean; cultivars, varieties, and/or hybrids of these.]

Root and Tuber Vegetables: (Crop Groups 1 and 2)  (and includes foliar of Root and Tuber Vegetables)  Carrot Potato Sweet Potato Yam Radish Sugarbeet and other root and tuber vegetables	For [suppression][control] of seedling and tuber diseases:  Pythium Phythophthora Rhizoctonia Verticillium Sclerotinia	2.6 – 5.2 oz	<ul> <li>For soil disease control, apply at planting as an in-furrow soil spray, drip irrigation (surface or buried) or with liquid fertilizer at planting.</li> <li>Follow with applications every 7-14 days with drip chemigation or post-directed sprays.</li> <li>For best placement to the soil area, apply via chemigation every 7-14 days until row closure.</li> <li>If applications made via post-directed sprays, following with irrigation to soak root zone.</li> <li>Fields with historical problems may require more applications and shorter frequency for better efficacy.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
	For foliar [suppression][control]of:  Early blight Late Blight Downy mildew Powdery mildew Leaf spots Botrytis	2.6 – 5.2 oz	<ul> <li>For foliar disease control, start applications prior to disease or at disease establishment.         Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides.     </li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>

[Root and Tuber Vegetables (Crop Groups 1 and 2): Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; beet, garden; beet, sugar; burdock, edible; canna, edible; carrot; cassava, bitter and sweet; celeriac; chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip; potato; radish; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret; sweet potato; tanier; turnip; yam bean; yam, true.]

Berry and small fruit: (Crop Group 13)  Grape Berry, cane Berry, bush Strawberry and other berries and small fruit	For [suppression][control] of seedling and crown diseases:  Pythium Phythophthora Rhizoctonia Verticillium	2.6 – 5.2 oz	<ul> <li>For soil disease control, apply as a drench on transplants prior to planting.</li> <li>For seedling diseases, apply at planting as an in-furrow spray or with liquid fertilizer or immediately following planting through drip irrigation (buried or surface) or as a basal spray.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>Fields with historical Rhizoctonia, and Pythium problems may require more applications and shorter frequency for better efficacy.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
I Down and an a	For foliar [suppression][control]of:  Powdery mildew Botrytis Downy mildew Anthracnose Mummyberry (Monilinia) Bacterial Canker (Pseudomonas spp.)	2.6 – 5.2 oz	<ul> <li>For foliar disease control, start applications prior to disease or at disease establishment. Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>

[Berry and small fruits (Crop Group 13): Amur river grape; aronia berry; bayberry; bearberry; bilberry; blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Orgeon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these); blueberry, highbush; blueberry, lowbush; buffalo currant; buffaloberry; che; Chilean guava; chokecherry; cloudberry; cranberry; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; grape; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); kiwifruit, fuzzy; kiwifruit, hardy; lingonberry; maypop; mountain pepper berries; mulberry; muntries; native currant; partridgeberry; phalsa; pincherry; raspberry, black and red; riberry; salal; schisandra berry; sea buckthorn; serviceberry; strawberry; wild raspberry; cultivars, varieties, and/or hybrids of these]

Cereals, small grain: (Crop Groups 15 and 16)  Wheat Barley	[suppression][control] of:  Fusarium head blight	2.6 – 5.2 oz	Best timing for control is prior to disease establishment upon head emergence. Tank mix with chemical fungicides or as a sequential application following chemical fungicides at 5-10 days
Corn, field Corn, pop Corn, sweet And other corn types	For seedling diseases:  Pythium Rhizoctonia	2.6 – 5.2 oz	<ul> <li>For seedling diseases, apply at planting or immediately following planting as an in furrow soil spray or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>Fields with historical Rhizoctonia and Pythium problems may require more applications and shorter frequency for better efficacy.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
	For foliar diseases: Common rust Leaf blights		<ul> <li>Start applications prior to disease or at disease establishment. Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>

Oil Seed Crops: (Crop Group 20) Sunflower Canola and other oil seed crops	Pythium Rhizoctonia Phytophthora  For [suppression][control] of:  White mold (Sclerotinia)	2.6 – 5.2 oz	<ul> <li>For seedling diseases, apply at planting or immediately following planting as an in furrow soil spray or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>For suppression of Sclerotinia, apply at 10% flowering. Follow with sequential applications to provide protection of dead or dying tissue prior to Sclerotinia establishment</li> <li>A combination of applications for Sclerotinia control should be drip, soil surface applications and foliar applications at infestation sites (dead or dying tissue) for optimum control.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
[Oil Seed (Crop Group 20): Borage; calendula; castor oil plant; Chinese tallowtree; cottonseed; crambe; cuphea; echium; euphorbia; evening primrose; flax seed; gold of pleasure; hare's ear mustard; jojoba; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; niger seed; oil radish; poppy seed; rapeseed; rose hip; safflower; sesame; stokes aster; sunflower; sweet rocket; tallowwood; tea oil plant; vernonia; cultivars, varieties, and/or hybrids of these ]			

Edible Fungi: (Crop Group 21)	Green mold	2.6 – 5.2	<ul> <li>Mix TAEGRO 2 into spawn medium at a rate of 10 grams per cubic foot. Thoroughly mix, using mechanical mixing</li> </ul>
Mushrooms and other edible fungi		OZ	equipment, to ensure a uniform distribution of product.

[Edible Fungi (Crop Group 21): Blewitt; bunashimeji; Chinese mushroom; enoki; himematsutake; hirmeola; maitake; morel; nameko; net bearing Dictyophora; oyster mushroom; pom pom; reishi mushroom; Rodman's agaricus; Shiitake mushroom; shimeji; stropharia; truffle; white button mushroom; white jelly fungi.]

Herbs and Spices: (Crop Group 19)	For [suppression][control]of seedling and crown diseases:  Fusarium Pythium Phythophthora Rhizoctonia Verticillium	2.6 – 5.2 oz	<ul> <li>For seedling diseases, apply at planting or immediately following planting as an in furrow soil spray or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>Fields with historical problems may require more applications and shorter frequency for better efficacy.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
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[Herbs and Spices (Crop Group 19): Allspice; angelica; anise; anise, star; annatto (seed); balm; basil; borage; burnet; camomile; caper buds; caraway; caraway, black; cardamom; cassia bark; cassia buds; catnip; celery seed; chervil (dried); chive; chive, Chinese; cinnamon; clary; clove buds; corainder leaf (cilantro or Chinese parsley); coriander seed (cilantro); costmary; cilantro (leaf); culantro (seed); cumin; curry (leaf); dill (dillweed); dill (seed); fennel (common); fennel, Florence (seed); fenugreek; grains of paradise, horehound; hyssop; juniper berry; lavender; lemongrass; lovage (leaf); lovage (seed); mace; marigold, marjoram; mustard (seed); nasturtium; nutmeg; parsley (dried); pennyroyal; pepper, black; pepper, white; poppy (seed); rosemary; rue; saffron; sage; savory, summer and winter; sweet bay; tansy; tarragon; thyme; vanilla; wintergreen; woodruff; wormwood.]

Citrus: (Crop Group 10)  Oranges Lemons Limes Grapefruit and other citrus crops	For [suppression][control]of: Phythophthora	2.6 – 5.2 oz Per 100 gallons of water	<ul> <li>Apply through drip irrigation (buried or surface) or drench applications to thoroughly soak the root zone to provide adequate protection. Soil type will determine how much irrigation is required to thoroughly penetrate root zone.</li> <li>Sequential applications should start at 7-14 days and be repeated based on disease severity.</li> </ul>
	Greasy spot Post bloom fruit drop Scab Melanose Alternaria leafspot	2.6 – 5.2 oz per 100 gallons of water	Start applications prior to disease or at disease establishment. Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides.

[Citrus (Crop Group 10): Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these ]

Pome Fruit: (Crop Group 11)	For [suppression][control]of: Fire blight (Erwinia amylovra)	2.6 – 5.2 oz per 100 gallons of water	<ul> <li>For dormant or prior to disease initiating, start applications every 3- 7days alone, or in rotation, or tank mix with other registered product for fire blight. Adequate coverage and penetration into infection sites is critical for acceptable control.</li> <li>It is important to use a volume that provides thorough coverage of the infection sites.</li> </ul>
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[Pome Fruit (Crop Group 11): Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.]

Tree Nuts: (Crop Group 14)	For [suppression][control] of:  Monilinia Walnut blight Anthracnose Shot hole	2.6 – 5.2 oz per 100 gallons of water	<ul> <li>Start applications prior to disease or at disease establishment. Apply every 3-7days alone, or in rotation, or tank mix with other registered fungicide.</li> <li>Initiate applications prior to pink bud stage (5% bloom) and follow with sequential applications as needed or in a program with registered fungicides as an IPM program.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides</li> </ul>
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[Tree Nuts (Crop Group 14): Almond; beechnut; Brazil nut; butternut; cashew; chestnut; chinquapin; filbert (hazelnut); hickory nut; macadamia nut; pecan; walnut, black and English.]

Stone Fruit: (Crop Group 12)	For [suppression][control] of:  Monilinia Powdery mildew Botrtyis Bacterial leaf spot	2.6 – 5.2 oz per 100 gallons of water	<ul> <li>Start applications prior to disease or at disease establishment. Apply every 3-7days alone, or in rotation, or tank mix with other registered fungicide.</li> <li>Initiate applications prior to pink bud stage (5% bloom) and follow with sequential applications as needed or in a program with registered fungicides as an IPM program.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides</li> </ul>
<del>-</del>	rop Group 12): Apricot; ch w; plum, Damson; plum, Ja	•	herry, tart; nectarine; peach; plum;
Tropical and Subtropical Fruits:  Lychee Papaya Avocado Guava Banana Plantain and other tropical fruit	For [suppression][control]of: Anthracnose Sigatoka	2.6 – 5.2 oz per 100 gallons of water	<ul> <li>Start applications prior to disease or at disease establishment. Apply every 3-7days alone, or in rotation, or tank mix with other registered fungicide.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
[Tropical and S sapote, canistel mamey sapote,	, cherimoya, custard apple	, feijoa, guava, uit,plantain,  p	moya, avocado, banana, biriba, black ilama, jaboticaba, lychee, longan, ulasan, rambutan, sapodilla,
Rice*  *Do not apply to flooded fields	For seedling diseases:  Rhizoctonia Pythium  For [suppression][control] of foliar diseases:  Sheath blight (Rhizoctonia) Bacterial blight and Streak (Xanthomonas) Sheath spot (R. oryzae)	2.6 – 5.2 oz	<ul> <li>For seedling diseases, apply at planting or immediately following planting as an in furrow soil spray or with liquid fertilizer.</li> <li>Start applications prior to disease or at disease establishment. For improved control, apply every 7-14 days in rotation or tank mix with other registered fungicide</li> </ul>

[Taegro 2 can also be used [via [soil] [or] [foliar] application] for the following listed uses: [vegetables,] [tree[s],] [vine[s],] [bushes,] and other crops], [herbs and spices,] [ornamental,] [shrubs, shade [trees] and forest trees,] and [turf].

## **SPECIALTY VEGETABLES**

Asparagus	Guar	Jucabbu	Wasabi
Flowers, Edible	Jicama	Lupin	

Soil-borne diseases:  Rhizoctonia Pythium Fusarium Phytophthora Sclerotinia	2.6 – 5.2 oz/A	<ul> <li>General recommendation: use in a program (tank mix or alternation) with other fungicides registered for these diseases/crops.</li> <li>Apply as drench on transplants prior to planting.</li> <li>Apply at planting or immediately following planting as an in furrow soil spray or with liquid fertilizer.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.</li> <li>A combination of applications for Sclerotinia control should be drip, soil surface applications and foliar applications at infestation sites (dead or dying tissue) for optimum control.</li> <li>Fields with historical soil-borne disease problems may require more applications and shorter frequency for better efficacy.</li> </ul>
Foliar diseases:  Powdery mildew Downy mildew Botrytis Alternaria	2.6 – 5.2 oz/A	<ul> <li>Start applications prior to disease or at disease establishment. Apply every 7-14 days alone, or in rotation, or tank mix with other registered fungicides</li> </ul>

**Seed beds and Seedling Plants**: Apply TAEGRO 2 to seed beds, seedlings or newly rooted cuttings. Drench soil with the TAEGRO 2 suspension making sure TAEGRO 2 is thoroughly drenched around the seed or into the root zone.

Mix and Apply TAEGRO 2 as follows:

- Per 100 gallons of water [By weight] use 2.6 5.2 oz (75-150 grams) of TAEGRO 2; [By volume,] use 3.5-7.0 fluid ounces of TAEGRO 2.
- Per 1 gallon of water [By weight] use 0.05 oz (1.5 grams) of TAEGRO 2.

Crop	Diseases	Rate (Oz/Acre)	Use Recommendations
Hemp	For [suppression][control] of foliar diseases:  Bacterial Speck ( <i>Pseudomonas</i> spp.) Bacterial Spot ( <i>Xanthomonas</i> spp.) Gray Mold ( <i>Botrytis cinerea</i> ) Downy Mildew Powdery Mildew		<ul> <li>For foliar disease control, start applications prior to disease or at disease establishment. Apply every 7- 14 days alone, or in rotation, or tank mix with other registered fungicides.</li> <li>Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.</li> </ul>
	For [suppression][control] of soilborne and seedling disease:  Fusarium spp. Pythium spp. Rhizoctonia spp. Sclerotinia	2.6 - 5.2 oz	<ul> <li>For soil disease control, apply as a drench on transplants prior to planting.</li> <li>For seedling diseases, apply at planting as an in-furrow spray or with liquid fertilizer or immediately following planting through drip irrigation (buried or surface) or as a basal spray.</li> <li>Follow with drip irrigation or basal sprays every 7-14 days as</li> </ul>
	For [suppression][control] of seedling and crown disease:  Verticillium		needed through the season. When using basal spray incorporate by following with irrigation to soak root zone.  • Fields with historical problems may require more applications and shorter frequency for better efficacy.  • Established or heavier disease pressure may require switching to rotations with or to chemical fungicides.

# **{START OPTIONAL CROP LISTING}**

# TREE, VINE, BUSH AND OTHER CROPS

Coconuts	Loquat	Persimmon	Tamarind
Coffee	Nursery Crops	Pineapples	
Hops	Olives	Pomegranates	

# **SHRUBS**

Abelia	Ceanothus	Hibiscus	Photina
Andromeda	Cleyera	Hickory	Pittosporum
Arborvitae	Cordyline	Holly	Podocarpus
Aucuba	Crape Myrtle	Hydrangea	Poinciana
Azalea	Crotoneaster	Indian Hawthorne	Privet
Bamboo	Cuttings	Juniper	Pyracantha
Barberry	Daphne	Laurel	Quince, Ornamental
Beauty Bush	Deutzia	Leucothoe	Rhamnus
Bedding Plants	Elderberry	Liqustrum	Rhododendron
Blueberry, Ornamental	Escallonia	Lilac	Rockrose
Bog Rosemary	Eugenia	Lippia	Rose
Bottlebrush	Euonymus	Manzanita	Santolina
Boxwood	Fig	Mock Orange	Snowberry
Bridal Wreath	Firethorn	Nandina	Spicebrush
Broom	Forsythia	Nursery Crops	Spirae
Buckthorn	Fuchsia	Oleander	St. John's Wort
Camellia	Guava	Oregon Grape	Viburnum
Caragana	Hawthorn	Osmanthus	Wax Myrtle
Carex	Heath	Pachistima	Weigla
Carob	Heather	Pachysandra	Yew

# **SHADE AND FOREST TREES**

Acacia	Cottonwood	Holly	Pine
Alder	Crabapple	Hornbeam	Poplar
Ash	Cuttings	Ironwood	Privet
Aspen	Cypress	Juneberry	Quince
Basswood	Dogwood	Juniper	Redbud
Bedding Plants	Douglas Fir	Larch	Redwood
Beech	Elder	Linden	Sassafras
Birch	Elm	Locust	Sourwood
Buckeye	Fir	Magnolia	Spruce
Butternut	Forest Seedlings	Maple	Sumac
Catalpa	Forest Trees	Mimosa	Sycamore
Cedar	Gingko	Mulberry	Tamarack
Chamaecyparis	Gum	Myrtle	Tulip Tree
Cherry, Wild	Hackberry	Nursery Crops	Willow
Chestnut	Hawthorn	Oak	Yellowwood
Christmas Trees	Hemlock	Palm	
Conifers	Hickory	PawPaw	

# **TURF**

Athletic Fields	Centipedegrass	Lawns, Commercial	Ryegrass, Perennial
Bahiagrass	Dichondra	Lawns, Industrial	Sod Farms
Bedding Plants	Fescue	Lawns, Institutional	St. Augustine Grass
Bentgrass	Golf Course, Fairways	Lawns, Residential	Turf, Commercial
Bermudagrass	Golf Course, Greens	Nursery Crops	Turf, Newly Plugged
Bluegrass, Kentucky	Golf Course, Roughs	Parks	Turf, Newly Sodded
Carpetgrass	Golf Course, Tees	Ryegrass, Annual	Zoysiagrass

# {END OPTIONAL CROP LISTING}

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. Novozymes Biologicals warrants that at the time of the first sale of this product it conforms to the chemical description on the label and when used according to the label directions under normal growing conditions is reasonably fit for the purposes referred to above. Buyers/Users of this product assume full risk for any use contrary to the specified directions. To the extent consistent with applicable law, if this product does not perform as warranted above, customer's sole remedy for breach of warranty shall be replacement of the product or refund of the purchase price paid, at the option of Novozymes Biologicals. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.

#### STORAGE AND DISPOSAL

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

## PESTICIDE STORAGE

TAEGRO 2 consists of living microbes. Store product at temperatures below 77°F (25°C) and use before the expiration date. Do not freeze. Close opened packages tightly.

## PESTICIDE DISPOSAL

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

## **CONTAINER DISPOSAL**

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances. If burned, stay out of smoke.

[Note to reviewer: This product is sold in a flexible plastic/foil lined bag.]

[Note:: The following information will be affixed to the unit package]

# TAEGRO® 2

## [Fungicide][For Suppression of Certain Diseases]

[TAEGRO 2 is a bacterial based biofungicide/bactericide used for suppressing selected soil-borne and foliar diseases on agricultural [[and ornamental] [and other]] crops]] [For Plant Strengthening, Growth Enhancement and Suppression of Certain Diseases]

ACTIVE INGREDIENT	% w/w
Bacillus subtilis var. amyloliquefaciens Strain FZB24*	10.4%
OTHER INGREDIENTS	<u>89.6%</u>
Total	100.0%

<sup>\*</sup>Contains a minimum of 1.0 x 10<sup>10</sup> Colony Forming Units [(CFU)]/gram of product.

## KEEP OUT OF REACH OF CHILDREN

## CAUTION

See attached booklet for [additional] [Precautionary Statements,] [and] [First Aid,] [and] complete Directions for Use, and Warranty.

## PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION** - Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Harmful if absorbed through skin, inhaled or swallowed. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

FIRST AID		
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
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 by mouth-to-mouth, if possible.</li> </ul>	
IF SWALLOWED:	<ul> <li>Call a Poison Control Center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</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 general information on this product contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST. You may also contact 1-800-222-1222 for emergency medical treatment information.

Net contents: [8.8 ounces (250 gm); or 13.2 oz (375gm); or 1 pound (lb.) 10.5 oz (750gm)]

Novozymes Biologicals, Inc. 5400 Corporate Circle • Salem, VA 24153, USA 1-800-342-6173

EPA Reg. No. 70127-12 EPA Est. No. [EPA Establishment No.] Made in USA

[NOVOZYMES RETHINK TOMORROW] [LOGO]

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