02-17-2011

STATED STATES TO ASSA

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

FILE COPY

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

February 17, 2011

Mel Graben Regulatory and Technical Manager Isagro USA, Inc 430 Davis Drive, Suite 240 Morrisville, NC 27560

Subject:	Product Name:	Bioten™ WP
-	EPA Reg. Number:	80289-9
	Application Date:	December 3, 2010
	EPA Receipt Date:	December 6, 2010

Dear Mr. Graben:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

#### **Proposed amendment:**

Revise label to add "OMRI" logo to the first page of label

#### General comments:

The proposed NOP phrase "For Use in Organic Production" is acceptable for the proposed commercial use patterns. However, if this product amends its label to add residential uses, you must create a master label with a sublabel delineating those new residential uses. The residential sublabel would need to reflect an Organic Gardening standard rather than an Organic Production standard.

Future labeling amendments may be accomplished by submitting a copy of the electronic label. Refer to the following website for guidance on electronic submissions, including label: <u>http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm.</u>

If you have any questions concerning electronic label submissions, please refer to the above website for a list of contact personnel for more information.

Should you have further questions concerning this letter, please contact me by telephone at (703) 308-8269 or by e-mail at <u>reilly.sheryl@epa.gov</u>, or Renae Whitaker by telephone at (703) 347-0136 or by email at <u>whitaker.renae@epa.gov</u> during the hours of 8:00 am to 3:30 pm EST. When submitting information or data in response to this letter, a copy of this letter should accompany the submission to facilitate processing.

Sincerely,

Sheryl K. Reilly, Ph. Ø), Chief Microbial Pesticides Branch Biopesticides and Pollution Prevention Division (7511P)

Enclosure: EPA stamped label

## Bioten<sup>TM</sup> WP (master)

(Alternate brand names: Tenet<sup>™</sup> WP and Remedier WP and Tenet<sup>™</sup> T&O)

#### SOR ORGANIC PRODUCTION

For protection of crops from attack by certain fungal diseases (e.g., *Armillaria* spp., *Fusarium* spp., *Phytophthora* spp., *Pythium* spp., *Rhizoctonia* spp., *Rosellinia* spp., *Sclerotinia* spp., *Sclerotinia* spp., *Sclerotinia* spp., *Constant and Verticillium* spp.).

#### ACTIVE INGREDIENTS:

Trichoderma asperellum (ICC 012) *	( (
Trichoderma gamsii (ICC 080) *	r
OTHER INGREDIENTS	e ci
TOTAL	

\* Contains a minimum of 5 x 10<sup>6</sup> colony forming units (CFU) of each *Trichoderma* strain *Trichoderma asperellum* strain ICC 012 and *Trichoderma gamsii* strain ICC 080)

Bioten<sup>™</sup>WP, Tenet<sup>™</sup> WP, and Tenet<sup>™</sup> T & O are trademarks of Isagro USA, Inc.

#### **KEEP OUT OF REACH OF CHILDREN**

## CAUTION

	FIRST AID
lf 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 further treatment advice.</li> </ul>
If swallowed:	<ul> <li>Call 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
For emergency inform	iner or label with you when calling a poison control center or doctor, or going for treatment. Inition concerning this product, call the National Pesticides Information

Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time. During all other times, call your poison control center at 1-800-222-1222.

For chemical emergency, spill, leak, fire, exposure, or accident, call CHEMTREC day or night in domestic North America at 1-800-424-9300 and internationally at 1-703-527-3883 (collect calls accepted).

EPA Registration Number: 80289-9



EPA Establishment Number: 80289-ITA-001 Net Weight: 2, 5 or 10 pounds



Distributed by: Sipcam Agro USA, 2520 Meridian Parkway, Suite 525, Durham, NC 27713

FEB 17 2011 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for age 1 of 21the pesticide registered under EPA Reg. No.  $go_{2}gg_{-}g$ 

### PRECAUTIONARY STATEMENTS

FEB 17 2011 Under the Federal Insecticide, Fungicid

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 80289-9

ACCEPTE

### CAUTION

Harmful if absorbed through skin or swallowed. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Wear waterproof gloves.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear the following:

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

Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting the NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

Users should:

#### USER SAFETY RECOMMENDATIONS

- Remove clothing/PPE immediately if pesticide gets inside. Then wash skin 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.

#### **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 170.240(d)(4-6)], 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.

#### **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 washwaters or rinsate.

This product may pose a risk to beneficial coleopteran (beetle) species. Do not apply this product in the following counties where endangered beetles have been found:

Texas - Red River, Lamar

Nebraska - Cherry, Brown, Keya Paha, Rock, Holt, Boyd, Thomas, Blaine, Loup, Garfield, Wheeler, Boone, Antelope, Lincoln, Dawson, Lancaster

Kansas - Elk, Wilson, Montgomery, Chatauqua

Arkansas - Logan, Sebastian, Franklin, Scott, Little River

Rhode Island - Washington (on Block Island)

Oklahoma - Osage, Craig, Rogers, Tulsa, Wagoner, Cherokee, Muskogee, Sequoyah, McIntosh, Haskell, Latimer, Le Flore, Pittsburg, Atoka, Pushmataha, McCurtain, Choctaw, Bryan, Johnston, Coal, Hughes, Okfuskee, Creek, Okmulgee, Mayes, Nowata, Ottawa, Washington, Delaware, Adair

South Dakota - Tripp, Gregory, and Todd"

#### DIRECTIONS FOR USE

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

Read the entire label. Use strictly in accordance with Precautionary Statements, Directions for Use, and applicable State and Federal regulations.

Do not apply this product in a way that will contact workers or other people, either directly or through drift. Only protected handlers may be in the area during 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 only 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 1 hour unless wearing the appropriate personal protective equipment.

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

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water), is:

- Coveralls
- Waterproof gloves
- Shoes plus socks



Under the Federal Insecticide, Fungicide, Page 3 of 21 and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 80289-9

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box only apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The Worker Protection Standard 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 or dusts have settled.

#### GENERAL INFORMATION

Bioten<sup>™</sup> WP is a biofungicide containing naturally occurring and selected strains of antagonistic fungi, *Trichoderma asperellum* strain ICC 012 *and Trichoderma gamsii* strain ICC 080.

Bioten<sup>™</sup> WP is particularly useful for the prevention of attacks to the root system and collar region of susceptible crops by the following phytopathogenic fungi: *Armillaria* spp., *Fusarium* spp., *Phytophthora* spp., *Pythium* spp., *Rhizoctonia* spp., *Rosellinia* spp., *Sclerotinia* spp., *Sclerotinia* spp., *Sclerotinia* spp., *Sclerotium* rolfsii, *Thielaviopsis* basicola, and *Verticillium* spp. After application, *Trichoderma* colonize the soil and roots of the host plant and compete with plant-pathogenic fungi for space and nutrients. Moreover, the antagonists also attack the cell walls of pathogens with enzymes. Therefore, it is essential to apply Bioten<sup>™</sup> WP before colonization of fungal pathogens occurs.

Bioten<sup>™</sup> WP should be applied up to 7 days before planting to initiate soil colonization before the crop is planted and reapplied at planting.

For maximum effectiveness, 2 or more applications of Bioten™ WP are recommended.

Bioten<sup>™</sup> WP may be applied throughout the crop production cycle in order to maintain a high colonization of the root zone.

Bioten<sup>™</sup> WP may be applied through fertigation systems in combination with the most common fertilizers.

Bioten<sup>™</sup> WP may be used on the crops indicated on this label. Bioten<sup>™</sup> WP may be prepared in advance to initiate conidial germination 24-36 hours prior to treatment. To prepare a suspension, combine 1 pound of Bioten<sup>™</sup> WP for every 1.25 gallons of water, and mix from time to time in order to promote the germination of conidia and obtain faster soil colonization. Subsequently, dilute the suspension in the amount of water that is stated in the Labeled Crops and Use Rates table.

Bioten<sup>™</sup> WP is a useful tool in managing chemical fungicide resistance.

#### **USE PRECAUTIONS**

- Do not apply by aircraft.
- Apply Bioten<sup>™</sup> WP when the soil temperature is at least 50°F (10°C).
- Apply Bioten<sup>™</sup> WP to moist soil or growth media, but not to saturated or waterlogged soil. Soil or growth media must remain moist after application of Bioten<sup>™</sup> WP to provide adequate control of soilborne fungal diseases listed on this label.
- Bioten™ WP may be applied to sterilized or fumigated soil, but must be applied after the sterilizing agent or fumigant has dissipated.

FEB 17 2011 Page 4 of 21 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.  $\Re_{22}\Re_{9}^{-9}$ 

- Bioten™ WP has no curative effect and therefore is not effective against plants infected with disease at the time of application.
- In case of applications on or to dry soils, pre-irrigate until soil is moist. Then irrigate again immediately after application.
- Bioten<sup>™</sup> WP product life is approximately 15 months when stored as directed under the Storage and Disposal section of this label.
- Bioten<sup>™</sup> WP is not compatible with the following fungicides: imazalil, dichloran, mancozeb, propiconazole, tebuconazole, thiram, and triflumizole. Do not tank mix with, or apply Bioten<sup>™</sup> WP within 3 days before or after use of these products.

#### GENERAL SOILBORNE/SEEDLING DISEASE CONTROL

Bioten<sup>™</sup> WP can provide control of many soilborne diseases if applied early in the growing season or growing cycle prior to infection by disease. Specific application methods covered in this label for soilborne diseases include cutting and bare root, broadcast, in-furrow, banded, greenhouse and nursery drench, and applications made via chemigation systems applied over the row or directed towards the desirable plants crown and rooting area, either before planting, at planting, or shortly after planting and promptly watered in. Use of different application types depends on the cultural practices in the region or the specific target disease to be controlled. In some locations, one type of application may provide better disease control than the other, depending on the timing of the disease cycle. For example, seedling diseases are generally controlled by in-furrow applications, while banded applications are generally more effective against soilborne diseases that develop later in the season. Consult your local expert to get some guidance regarding application type.

#### DILUTION INFORMATION

Bioten<sup>™</sup> WP may be prepared in advance to initiate conidial germination 24-36 hours prior to treatment. To prepare a suspension, combine 1 pound of Bioten<sup>™</sup> WP for every 1.25 gallons of water, and mix from time to time in order to promote the germination of conidia and obtain faster soil colonization. Subsequently, dilute the suspension in the amount of water that is stated in the Labeled Crops and Use Rates table.

#### **BIOTEN™ WP TANK MIXTURES**

Bioten<sup>™</sup> WP is not compatible with the following fungicides: imazalil, dichloran, mancozeb, propiconazole, tebuconazole, thiram, and triflumizole. Do not tank mix with, or apply Bioten<sup>™</sup> WP within 3 days before or after use of these products.

Tank mixture compatibility is relative to both physical formulation compatibility and biological - chemical compatibility.

#### **Tank Mixture Compatibility Testing**

Before tank mixing Bioten<sup>™</sup> WP with other pesticides or materials, it is recommended that a compatibility or jar test be performed. In order to perform the compatibility test, the relative proportions of the materials being considered for tank mixture should be added to a clear quart jar. After addition to the jar, invert or shake the jar numerous times to ensure complete mixing then observe the jar for at least one-half hour. If precipitates (sludges, layers, flakes, balls, etc.) form, the tank mixture combination is not compatible and should not be used.

#### Order of Mixing

- 1. Fill the tank at least one-half full of water and begin agitation.
- Add materials in the following order: Bioten<sup>™</sup> WP, dry flowables (DF), wettable powders (WP), aqueous suspensions (AS), flowables (F), and liquids (L).

- 3. Allow each material to completely disperse before adding the next material.
- 4. While continuing agitation, fill the tank to three-fourths full.
- 5. Add any solution (S) formulations and surfactants.
- 6. Bring the tank to final volume.
- 7. Maintain agitation during the filling process and until the application is complete. If agitation and application are stopped, suspended materials may settle out to the bottom of the tank. It is very important to re-suspend all materials in the tank before applications are resumed. Sparger-type agitators are useful for these circumstances. Do not allow tank mixtures to remain in the spray tank overnight

Refer to the companion pesticide label(s) for all applicable use directions, restrictions, and precautions. Observe the most restrictive of the labelling limitations and precautions of all products used in mixtures.

#### INSTRUCTIONS FOR APPLICATION METHODS COVERED UNDER THIS LABEL

#### CUTTINGS, BARE ROOT, CROWN DIP AND PREPLANT DUST APPLICATIONS

- Dip cuttings, bare root transplants, crowns, or bulbs in undiluted Bioten<sup>™</sup> WP powder or in a suspension that contains 0.25 2.0 lbs of Bioten<sup>™</sup> WP/gallon of water.
- After dipping the cutting, bare root transplant, bulb or crown, follow standard practices for planting.

#### **BROADCAST APPLICATIONS**

- For broadcast applications, apply Bioten<sup>™</sup> WP as a spray at a minimum volume of 10 gallons of water per acre prior to or at planting. Thorough and uniform coverage of the soil surface is necessary. Immediate incorporation of the Bioten<sup>™</sup> WP is necessary either by watering in using sufficient water to wet the upper 1" of soil or using light cultivation to incorporate the treatment into the seeding or rooting zone.
- Use higher application rates when the weather conditions are expected to be conducive for disease development, if the field has a history of disease development, if disease pressure is high, or if minimum/low till programs are in place.

#### **IN-FURROW SPRAY APPLICATIONS**

- Seedling diseases are generally controlled by in-furrow applications.
- For in-furrow applications, apply Bioten<sup>™</sup> WP as an in-furrow spray in 3-15 gallons of water per acre at planting.
- Mount the spray nozzle so the spray is directed into the furrow just before the seeds are covered.
- Use higher application rates when the weather conditions are expected to be conducive for disease development, if the field has a history of disease development, if disease pressure is high, or if minimum/low till programs are in place.
- The following table provides common row spacings and the amount of Bioten<sup>™</sup> WP to apply when banding a 4" in-furrow spray into the seeding trench.

## ACCEPTED

FEB 17 2011 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 802 89-9

Page 6 of 21

	Bioten™ WP	Rates for In-furr	ow Spray Applica	ations (oz/A) <sup>1</sup>	,,,,,,,,,
Rate per 1000 row ft <sup>2</sup>	20" row spacing	24" row spacing	30" row spacing	36" row spacing	40" row spacing
1.5 oz	7.8 oz/A	5.4 oz/A	3.5 oz/A	2.4 oz/A	2.0 oz/A
3.0 oz	15.7 oz/A	10.9 oz/A	7.0 oz/A	4.8 oz/A	3.9 oz/A
<sup>2</sup> 1.5 oz/1000 r	provided are bas ow feet is equiva the 5.0 lb/A broa	lent to the 2.5 lb	4" zone of the se ⁄A broadcast rate	eding furrow. and 3.0 oz/1000	) row feet is

ĺ

• If a banded in-furrow spray different from 4" is needed, use the following equation to calculate the appropriate application rate. Row feet per acre at common row widths are provided below.

band width in inches	r <u>ate in oz</u>	x row feet per acre =	amount product needed
row width in inches	1000 row feet	(see chart below)	in (oz/A)

Row width	20"	24"	30"	36"	40"
Row feet/A	26,136	21,780	17,424	14,520	13,068

#### **GROUND BANDED APPLICATIONS**

- Soilborne diseases that develop later in the season are generally controlled by banded applications that are watered in by irrigation.
- In banded applications, applied band width depends on crop and plant root diameter.
- For banded applications, apply Bioten<sup>™</sup> WP prior to infection as a directed spray to the soil, using single or multiple nozzles adjusted to provide thorough coverage of the soil surface in close proximity to the plant and lower stems. For surface banded applications, immediate watering in with 0.25" to 0.5" of water is required for optimum performance. Soil applications can be applied during cultivation or hilling operations to provide soil incorporation, followed by watering in with 0.25" to 0.5" of water.
- Use higher application rates when the weather conditions are expected to be conducive for disease development, if the field has a history of disease development, if disease pressure is high, or if minimum/low till programs are in place.
- Application rates in the Labeled Crops and Use Rates table are generally expressed as an amount per acre, which refers to the total crop acreage to be treated. If a 7 inch band is used, consult the table below for the ounces of product needed per acre of field. If a band width other than 7 inches is desired, consult the formula provided below to determine the appropriate amount of product needed.

<u>band width in inches</u> x broadcast rate x 16 ounces= amount product needed in ounces row width in inches pounds per acre per pound per acre of field

	÷	Bioten™ WP	rate for Bande (oz/acre)	ed Applications		
		20"	24"	30"	36"	40"
Spray band	Rate	row	row	row	row	row
width	per Acre	spacing	spacing	spacing	spacing	spacing
7"	2.5 lb/A	14 oz/A	12 oz/A	9.3 oz/A	7.8 oz/A	7 oz/A
7"	5.0 lb/A	28 oz/A	23 oz/A	18.7 oz/A	15.6 oz/A	14 oz/A

#### HANDHELD OR BACKPACK DRENCH APPLICATIONS

- Bioten™ WP may be applied by handheld or backpack sprayer as a drench application.
- Suspend Bioten<sup>™</sup> WP at a rate of 0.025 0.075 oz/gallon of water with thorough agitation.



Page 7 of 21

under the Federal Insecticide, Fungicide, ang 89-9

- If using this method, thorough wetting of the first inch of soil with the Bioten<sup>™</sup> WP suspension is required.
- It is required that sprayer clean out directions (listed in the Sprayer Tank Cleanout section at the end of this label) are followed before mixing Bioten<sup>™</sup> WP in sprayers previously used for other pesticides.

#### **GREENHOUSE AND NURSERY DRENCH APPLICATIONS**

- Suspend 2.5 7.5 oz Bioten<sup>™</sup> WP in 100 gallons water with thorough agitation and apply suspension as a drench to greenhouse plantings or container crops.
- For flats or beds with a maximum depth that does not exceed 4 inches, apply 50 to 100 gallons prepared Bioten<sup>™</sup> WP suspension per 800 ft<sup>2</sup>.
- Apply 4 to 8 fluid ounces (½ to 1 cup) of prepared Bioten<sup>™</sup> WP suspension per pot or container, or 100 gallons per 400 ft<sup>2</sup> prepared Bioten<sup>™</sup> WP suspension when the flat, bed, or container exceeds a depth of 4 inches.
- Constant agitation during application will ensure Bioten<sup>™</sup> WP remains in suspension.

#### CHEMIGATION

- Apply Bioten<sup>™</sup> WP through listed irrigation/chemigation systems up to 1 week prior to planting and immediately after planting or transplanting. Apply 2.5 to 5.0 lbs product per acre.
- Bioten<sup>™</sup> WP applications may be repeated every 14 to 21 days as needed depending upon disease pressure.
- Bioten<sup>™</sup> WP should be applied to moderately moist soils using irrigation volumes (typically 0.25 to 0.50 inches water) that do not cause runoff from the treated area. Agitation during the application process should be continuous and application volume constant in order to apply the specified application rate evenly to the treated area.
- Bioten<sup>™</sup> WP may be premixed in a supply tank with water when fertilizer or other allowed tank mixed agricultural chemicals are needed. Constant agitation is necessary.
- Mix Bioten<sup>™</sup> WP into at least 50 gallons or more of water while maintaining continuous agitation and inject through a 50 mesh screen into the irrigation line. Alternatively, a suspension may be formed using a smaller volume of water. This may be performed by combining 1 pound of Bioten<sup>™</sup> WP for every 1.25 gallons of water and mixing thoroughly. Next, pour the suspension through a 50 mesh screen into the final volume of water for injection into the chemigation system.
- Apply Bioten<sup>™</sup> WP immediately and do not allow the product to remain for prolonged periods (i.e. overnight) in the chemigation system as settling of the suspension may occur.
- Injection of the Bioten<sup>™</sup> WP suspension should be performed only after the system has become fully pressurized with water (normally 30 to 60 minutes after start up) to allow uniform distribution of the product over the target area.
- After application, flush the system with clean water for another 15 to 20 minutes to clear the irrigation lines and prevent fouling.
- Refer to General Chemigation Requirements below for additional use instructions and requirements.

#### **General Chemigation Requirements**

- Apply Bioten<sup>™</sup> WP only through the following chemigation systems: 1) overhead boom and mist-type irrigation systems, or sprinklers such as impact or micro-sprinklers, 2) pressurized drench (flood) or drip (trickle) systems, 3) micro-irrigation such as spaghetti-tube or individual tube irrigation, 4) hand-held calibrated irrigation equipment such as the hand-held wand with injector, and 5) ebb and flow systems. Do not apply this product through any other type of irrigation system.
- Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### **Requirements for Chemigation Systems Connected to Public Water Systems**

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional, reducedpressure zone (RPZ), back flow preventor or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favor drift beyond the area intended for treatment.
- Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and injector system and flush with clean water before use. Failure to provide a clean tank, free of scale or residues may reduce effectiveness of this product.

#### **Requirements for Sprinkler Chemigation**

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from 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, 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.
- 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.



Under the Federal Insecticide, Fungicide, Pag and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.  $_{RO2}$ 89-9

Page 9 of 21

- 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.

#### **Requirements for Flood 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.
- Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - 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.

#### **Requirements for Drip Chemigation**

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from 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, 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.
- The system must contain functional inter-locking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to 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.

## ACCEPTED

### FEB 17 2011

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.  $g_{0,2}g_{-}q_{-}$ 

Page 10 of 21

#### LABELED CROPS AND USE RATES

(

CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
Alfalfa (for use in forage and seed crops, including birdsfoot trefoil) Cereal Grains (including barley, oats, rye, triticale, wheat, and Durum wheat)	In-Furrow	1.5 to 3 oz per 1000 row feet. Refer to In-Furrow Application Rate table for specific rate based on band width and row width. If disease pressure is high, use the higher application rate.
Clover (for use in forage and seed crops) Corn (all types, including field corn, popcorn, sweet corn, and corn produced for seed)	Banded	<ul> <li>2.5 to 3 lb/A. Refer to Banded Application Rate table to calculate the proper use rate based on band width and row width.</li> <li>If disease pressure is high, use the higher application rate.</li> </ul>
Cotton Ginseng	Broadcast (Application method is described in the text preceding	Apply 2.5 – 5.0 lb/A at sowing, at restart of vegetative growth, and before the infection risk period. If rainfall is not expected, follow the treatment
Grass, Forage, Fodder, and Hay (including pasture grasses and grasses grown for hay or silage such as Bermuda grass, bluegrass, brome grass, and fescue) Peanut Sunflower	this table.)	with light irrigation of 0.25 – 0.5 inches of water per acre. Alternatively, apply 0.92 to 1.8 oz per 1000 square feet in at least 3 to 5 gallons water to obtain thorough wetting of the soil. If disease pressure is high, use the higher application rate.
Тоbассо	Chemigation (This covers all methods of irrigation described in the text preceding this table.)	Apply 2.5 – 5 lb product/A. If disease pressure is high, use the higher application rate.
Berries Bushberries (including blueberry, cranberry, currant, elderberry, gooseberry, huckleberry, juneberry, lingonberry, salal, strawberry,	Cuttings and Bare Root	Dip into undiluted Bioten <sup>™</sup> WP or prepare solution, composed of 0.25 – 2 lbs of Bioten <sup>™</sup> WP/gallon of water, for dipping. If disease pressure is high, use the higher application rate.
and all cultivars and hybrids of these) Caneberries (including blackberry, boysenberry,	Substrate Mix	Mix 0.5 – 1.5 lb/cubic yard substrate. If disease pressure is high, use the higher application rate.

CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
marionberry, loganberry, raspberry, and all cultivars and hybrids of these)		
	In-Furrow	1.5 to 3 oz per 1000 row feet. Refer to In-Furrow Application Rate table for specific rate based on band width and row width. If disease pressure is high, use the higher application rate.
	Banded	<ul> <li>2.5 to 3 lb/A. Refer to Banded Application Rate table to calculate the proper use rate based on band width and row width.</li> <li>If disease pressure is high, use the higher application rate.</li> </ul>
	Chemigation (This covers all methods of irrigation described in the text preceding this table.)	Apply 2.5 – 5 lb product/A. If disease pressure is high, use the higher application rate.
	Greenhouse and Nursery Drench	Suspend 2.5 to 7.5 oz per 100 gallons water. Refer to Greenhouse and Nursery Drench instructions to determine application rate based on container size. If disease pressure is high, use the higher application rate.
	Handheld or Backpack Drench Applications	0.025 – 0.075 oz/gallon of water. Apply in sufficient volume to thoroughly wet the soil. If disease pressure is high, use the higher application rate.
<b>Cole Crops</b> (including broccoli, brussel sprouts, cabbage, cauliflower, Chinese cabbage, collards, kale, kohlrabi, mustard greens, rape greens, and all hybrids and varieties	Substrate Mix	Mix 0.5 – 1.5 lb/cubic yard substrate. If disease pressure is high, use the higher application rate.

 $\langle$ 

(

14

23

## ACCEPTED

### FEB 17 2011

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. gv289-9

Page 12 of 21

CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
of these) <b>Cucurbits</b> (including cantaloupe, chinese waxgourd, cucumber, gherkin, gourd–edible, honeydew, <i>Momordica</i> spp., muskmelon, pumpkins, squash–summer, squash– winter, watermelon, zucchini, and all hybrids and cultivars of these)	Broadcast (Application method is described in the text preceding this table.)	Apply $2.5 - 5.0$ lb/A at sowing, at restart of vegetative growth, and before the infection risk period. If rainfall is not expected, follow the treatment with light irrigation of $0.25 - 0.5$ inches of water per acre. If disease pressure is high, use the higher application rate.
Fruiting Vegetables (including eggplant, groundcherry, okra, pepino, pepper, tomatillo, and tomato) Leafy Vegetables (Except Brassica) (including amaranth, arugula, cardoon, celery, celtuce, chervil, Chinese celery, chrysanthemum, corn salad, cress,	In-Furrow	<ul> <li>1.5 to 3 oz per 1000 row feet.</li> <li>Refer to In-Furrow Application</li> <li>Rate table for specific rate</li> <li>based on band width and row</li> <li>width.</li> <li>If disease pressure is high, use</li> <li>the higher application rate.</li> </ul>
dandelion, dock, endive, florence fennel, lettuce–head, lettuce– leaf, orach, parsley, purslane, radicchio, rhubarb, spinach, and swiss chard) <b>Legume Vegetables</b> (including bean <i>Lupinus</i> spp., bean <i>Phaseolus</i> spp., bean <i>Vigna</i> spp. including asparagus, broad bean–fava,	Banded	2.5 to 3 lb/A. Refer to Banded Application Rate table to calculate the proper use rate based on band width and row width. If disease pressure is high, use the higher application rate.
chickpea–garbonzo bean, lentil, pea <i>Pisum</i> spp., pigeon pea, soybean, including all hybrids and varieties of these) <b>Root, Tuber, and Corm Vegetables</b>	Chemigation (This covers all methods of irrigation described in the text preceding	Apply 2.5 – 5 lb product/A. If disease pressure is high, use the higher application rate.
(including arrowroot, Chinese and Jerusalem artichoke, garden beet, sugar beet, edible burdock, carrot, cassava, celeriac, chayote, chervil, chicory, ginger, ginseng, horseradish, parsley, turnip– rooted parsley, parsnip, potato, radish, oriental radish, rutabaga, salsify, sweet potato, taro, tumeric, turnip, yam bean, and true yam)	this table.) Greenhouse and Nursery Drench	Suspend 2.5 to 7.5 oz per 100 gallons water. Refer to Greenhouse and Nursery Drench instructions to determine application rate based on container size. If disease pressure is high, use the higher application rate.

(

 $\langle$ 

## ACCEPTED

### FEB 17 2011

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 80289-9

Page 13 of 21

CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
	Handheld or Backpack Drench Applications	0.025 – 0.075 oz/gallon of water. Apply in sufficient volume to thoroughly wet the soil. If disease pressure is high, use the higher application rate.
Herbs (Fresh, Dried, and for Oil) (including angelica, basil, catnip, chervil, catnip, chamomile, chive, cilantro–leaf, coriander–leaf, curry, dillweed, fennel, hyssop, lavender, lemongrass, marigold, marjoram, mint, nasturtium, parsley,	Cuttings and Bare Root	Dip into undiluted Bioten <sup>™</sup> WP or prepare solution, composed of 0.25 – 2 lbs of Bioten <sup>™</sup> WP/gallon of water, for dipping. If disease pressure is high, use the higher application rate.
peppermint, rosemary, sage, savory– summer, savory–winter, spearmint, sweet bay, tansy, tarragon, thyme, wintergreen, woodruff, and wormwood)	Substrate Mix	Mix 0.5 – 1.5 lb/cubic yard substrate. If disease pressure is high, use the higher application rate.
	In-Furrow	<ul> <li>1.5 to 3 oz per 1000 row feet.</li> <li>Refer to In-Furrow Application</li> <li>Rate table for specific rate</li> <li>based on band width and row</li> <li>width.</li> <li>If disease pressure is high, use</li> <li>the higher application rate.</li> </ul>
	Banded	2.5 to 3 lb/A. Refer to Banded Application Rate table to calculate the proper use rate based on band width and row width. If disease pressure is high, use the higher application rate.
	Broadcast (Application method is described in the text preceding this table.)	Apply 2.5 – 5.0 lb/A at sowing, at restart of vegetative growth, and before the infection risk period. If rainfall is not expected, follow the treatment with light irrigation of 0.25 – 0.5 inches of water per acre. If disease pressure is high, use the higher application rate.
ACCEPTED	Chemigation (This covers all	Apply 2.5 – 5 lb product/A. If disease pressure is high, use
FEB 17 2011	methods of irrigation	the higher application rate.
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. SD289-9	described in the text preceding this table.)	

(

(

CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
	Greenhouse and Nursery Drench	Suspend 2.5 to 7.5 oz per 100 gallons water. Refer to Greenhouse and Nursery Drench instructions to determine application rate based on container size. If disease pressure is high, use the higher application rate.
	Handheld or Backpack Drench Applications	0.025 – 0.075 oz/gallon of water. Apply in sufficient volume to thoroughly wet the soil. If disease pressure is high, use the higher application rate.
Dnions Dry Bulb garlic, onions, shallots) Green	Pre-Plant Dust (Application method is described in the text preceding this table.)	Dip into undiluted Bioten™ WP prior to planting.
reen eschalots, green onions, green nallots, Japanese bunching onions, eks, spring onions, and scallions)	In-Furrow	<ul> <li>1.5 to 3 oz per 1000 row feet.</li> <li>Refer to In-Furrow Application</li> <li>Rate table for specific rate</li> <li>based on band width and row</li> <li>width.</li> <li>If disease pressure is high, use</li> <li>the higher application rate.</li> </ul>
	Banded	<ul> <li>2.5 to 3 lb/A. Refer to Banded Application Rate table to calculate the proper use rate based on band width and row width.</li> <li>If disease pressure is high, use the higher application rate.</li> </ul>
	Chemigation (This covers all methods of irrigation described in the text preceding this table.)	Apply 2.5 – 5 lb product/A. If disease pressure is high, use the higher application rate.
ACCEPTED FEB 17 2011 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 80289-9	Greenhouse and Nursery Drench	Suspend 2.5 to 7.5 oz per 100 gallons water. Refer to Greenhouse and Nursery Drench instructions to determine application rate based on container size. If disease pressure is high, use

(

(

CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
		the higher application rate.
	Handheld or Backpack Drench Applications	0.025 – 0.075 oz/gallon of water. Apply in sufficient volume to thoroughly wet the soil. If disease pressure is high, use the higher application rate.
(Application method is described i text preced this table.) In-Furrow Banded Chemigation (This cover methods o irrigation described text preced	described in the text preceding	Dip into undiluted Bioten™ WP or prepare solution, composed of 0.25 – 2 lbs of Bioten™ WP/gallon of water, for dipping. If disease pressure is high, use the higher application rate.
	In-Furrow	<ul> <li>1.5 to 3 oz per 1000 row feet.</li> <li>Refer to In-Furrow Application</li> <li>Rate table for specific rate</li> <li>based on band width and row</li> <li>width.</li> <li>If disease pressure is high, use</li> <li>the higher application rate.</li> </ul>
	Banded	2.5 to 3 lb/A. Refer to Banded Application Rate table to calculate the proper use rate based on band width and row width. If disease pressure is high, use the higher application rate.
	Chemigation (This covers all methods of irrigation described in the text preceding this table.)	Apply 2.5 – 5 lb product/A. If disease pressure is high, use the higher application rate.
	Greenhouse and Nursery Drench	Suspend 2.5 to 7.5 oz per 100 gallons water. Refer to Greenhouse and Nursery Drench instructions to determine application rate based on container size. If disease pressure is high, use the higher application rate.
ACCEPTED	Handheld or Backpack Drench Applications	0.025 – 0.075 oz/gallon of water. Apply in sufficient volume to thoroughly wet the soil. If disease pressure is high, use

Ć

Under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 802.89-9

-

(

Ŕ		(
CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
<b>Citrus</b> (including calamondin, citrus citron, citrus hybrids (i.e., chironja, tangelo, and tangor), grapefruit, kumquat, lemon, lime, mandarin–tangerine, orange, pummelo, Satsuma mandarin, and all cultivars and hybrids of these) <b>Olive</b>	Cuttings and Bare Root	Dip into undiluted Bioten <sup>™</sup> WP or prepare solution, composed of 0.25 – 2 lbs of Bioten <sup>™</sup> WP/gallon of water, for dipping. If disease pressure is high, use the higher application rate.
	Substrate Mix	Mix 0.5 – 1.5 lb/cubic yard substrate. If disease pressure is high, use the higher application rate.
Pomegranate	In-Furrow	1.5 to 3 oz per 1000 row feet. Refer to In-Furrow Application
<b>Tree Fruit (Pome Fruit)</b> (including deciduous trees bearing pome fruit such as apple, pear, crabapple, loquat, mayhew, oriental pear, and quince)		Rate table for specific rate based on band width and row width. If disease pressure is high, use the higher application rate.
<b>Tree Fruit (Stone Fruit)</b> (including bearing and non-bearing apricot, sweet and tart cherry, nectarine, peach, plum, plumcot, prune, and all hybrids and cultivars of these)	Banded	2.5 to 3 lb/A. Refer to Banded Application Rate table to calculate the proper use rate based on band width and row width. If disease pressure is high, use the higher application rate.
<b>Tree Nuts</b> (including almonds, beechnut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert, hickory, hazelnuts, macadamia, pecans, pistachios, and walnuts)	Chemigation (This covers all methods of irrigation described in the text preceding this table.)	Apply 2.5 – 5 lb product/A. If disease pressure is high, use the higher application rate.
<b>Tropical Fruit</b> (including acerola, atemoya, avocado, canistel, cherimoya, custard apple, ilama, guava, kiwifruit, longan, loquat, lychee, mango, mangosteen, papaya, pashionfruit, pawpaw, persimmon, pummello, rambutan, black sapote, mamey sapote, sapodilla, soursop, star apple, starfruit, sugar apple, apd	Greenhouse and Nursery Drench	Suspend 2.5 to 7.5 oz per 100 gallons water. Refer to Greenhouse and Nursery Drench instructions to determine application rate based on container size. If disease pressure is high, use the higher application rate.
apple, starfruit, sugar apple, and tamarind) <b>Vines</b> (including table, wine, raisin grapes, muscadines, hops, kiwi)	Handheld or Backpack Drench Applications	0.025 – 0.075 oz/gallon of water. Apply in sufficient volume to thoroughly wet the soil. If disease pressure is high, use the higher application rate.
Bulb Crops (limited to ornamental bulbs) ACCEPTED	Pre-Plant Dust (Application method is described in the	Dip into undiluted Bioten™ WP prior to planting.
FEB 1 7 2011		Page 17 of 21

19

CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
ACCEPTED FEB 17 2011 Inder the Federal Insecticide, Fungicide, nd Rodenticide Act, as amended, for he pesticide registered under IPA Reg. No. 80289-9	text preceding this table.)	
	Banded	2.5 to 3 lb/A. Refer to Banded Application Rate table to calculate the proper use rate based on band width and row width. If disease pressure is high, use the higher application rate.
	Chemigation (This covers all methods of irrigation described in the text preceding this table.)	Apply 2.5 – 5 lb product/A. If disease pressure is high, use the higher application rate.
	Greenhouse and Nursery Drench	Suspend 2.5 to 7.5 oz per 100 gallons water. Refer to Greenhouse and Nursery Drench instructions to determine application rate based on container size.
	Handheld or Backpack Drench Applications	If disease pressure is high, use the higher application rate. 0.025 – 0.075 oz/gallon of water. Apply in sufficient volume to thoroughly wet the soil. If disease pressure is high, use the higher application rate.
Herbaceous Potted Flowers, Bedding Plants, and Ornamentals (including chrysanthemums, cyclamen, geranium, hollyhock, lily, pansy, petunia, poinsettia, primrose, and snapdragon)	Cuttings and Bare Root	Dip into undiluted Bioten <sup>™</sup> WP or prepare solution, composed of 0.25 – 2 lbs of Bioten <sup>™</sup> WP/gallon of water, for dipping. If disease pressure is high, use the higher application rate.
Ornamental Trees Non-Flowering Deciduous and Non- Deciduous Landscape, Ornamental, Forest, and Nursery Trees (including ash, elm, linden, maple, and sycamore) Evergreen/Conifers and Christmas Trees (including cedar, fir, pine, spruce, yew,	Substrate Mix	Mix 0.5 – 1.5 lb/cubic yard substrate. If disease pressure is high, use the higher application rate.
	Chemigation (This covers all methods of irrigation described in the text preceding	Apply 2.5 – 5 lb product/A. If disease pressure is high, use the higher application rate.

Ć

Ć

CROPS	METHOD OF APPLICATION	USE RATE AND APPLICATION INSTRUCTIONS
Flowering and Non-Bearing Fruit Trees (including crabapple, hawthorn, cherry, plum, and pear) Tropical Foliage and Flowering Plants (including fern, English ivy, pothos, and poinsettia) Nursery, Shrubs, and Woody Ornamentals (including azalea, holly, pittosporum, and rose)	Greenhouse and Nursery Drench Handheld or Backpack Drench Applications	Suspend 2.5 to 7.5 oz per 100 gallons water. Refer to Greenhouse and Nursery Drench instructions to determine application rate based on container size. If disease pressure is high, use the higher application rate. 0.025 – 0.075 oz/gallon of water. Apply in sufficient volume to thoroughly wet the soil. If disease pressure is high, use the higher application rate.
Turf Grass (including turf, golf coursesall uses, sports fields, sod and seed production)	Broadcast (Application method is described in the text preceding this table.)	Apply 2.5 – 5.0 lb/A at sowing, at restart of vegetative growth, and before the infection risk period. If rainfall is not expected, follow the treatment with light irrigation of 0.25 – 0.5 inches of water per acre. Alternatively, apply 0.92 to 1.8 oz per 1000 square feet in at least 3 to 5 gallons water to obtain thorough wetting of the soil. If disease pressure is high, use the higher application rate.

#### SPRAYER TANK CLEANOUT

#### DO NOT USE CHLORINE BLEACH WITH AMMONIA

To avoid injury to desirable crops, clean all mixing and spray equipment before and immediately following applications of Bioten™ WP as follows:

- Drain remaining spray solution from spray tank. Thoroughly rinse spray tank, boom, and hoses with clean water. Remove the nozzles, screens and any components contacting the spray solution and clean separately in a bucket containing ammonia and water. Loosen and physically remove any visible deposits.
- Fill the tank with clean water and 1 gallon of household ammonia (minimum 3% ammonia) for every 100 gallons of water. Flush the hoses, boom, and nozzles with the cleaning solution.\*

# ACCEPTED

FEB 17 2011

Under the Federal Insecticide, Fungicide, 9 of 21 and Rodenticide Act, as amended, for the pesticide registered under FPA Reg. No. 80289-9

- Refill the spray tank back to full. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Again flush the hoses, boom, and nozzles with the cleaning solution and then drain the tank.
- Remove the nozzles, screens and components as before and clean separately in a bucket containing ammonia and water.
- Repeat step 2.
- Rinse the tank, boom, and hoses with clean water.
- The rinsate may be disposed of on-site or at an approved disposal facility.

\* If using an ammonia product that is not 3% ammonia, an equivalent amount of an alternate strength ammonia solution can be used in the clean out procedure. Carefully read and follow the individual cleaner instructions.

### STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Store at temperatures below 75°F, under well-vented and dry storage conditions. Do not store under moist conditions. Do not allow product to freeze. Store the tightly resealed container in a dry place and not exposed directly to sun. Product life is approximately 15 months when stored as directed.

#### 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 HANDLING

Nonrefillable, non-rigid 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.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire label before using this product, including this Limitation of Warranty and Liability.

If the terms are not acceptable, return the unopened product at once for a refund of the purchase price.

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Directions for Use, subject to the inherent risks described below, when used in accordance with the Directions for Use under normal conditions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ISAGRO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Buyers and Users of this product must be aware that there are inherent unintended risks associated to the use of this product, independent from the control of ISAGRO. These risks include, but are not limited to, weather conditions, soil factors, moisture conditions, diseases,

Page 20 of 21

ACCEPTED FEB 17 2011

Under the Federal Insecticide, Fungic and Rodenticide Act, as amended, fo the pesticide registered under EPA Reg. No. 50289-9 irrigation practices, condition of the crop at the time of application, materials which are present in the tank mix with this product or prior to the application of it, cultural practices or the manner of use or application, all risks which are impossible to eliminate. The Buyers and Users should be aware that these factors may cause: ineffectiveness of the product, reduction of harvested yield of the crop (entirely or partially), crop injury or injury to non-target crops or plants or to rotational crops caused by carryover in the soil, resistance of the target weeds to this product. Therefore, additional care, treatment and expense are required to take the crop to harvest. If the Buyer does not agree with the acceptance of these risks, then THE PRODUCT SHOULD NOT BE APPLIED.

To the extent consistent with applicable law, in no event shall ISAGRO or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product (including claims based in contract, negligence, strict liability, other tort, or otherwise). To the extent consistent with applicable law, the exclusive remedy of the User or Buyer and the exclusive Liability of ISAGRO or Seller shall be the return of the purchase price of the product, or at the election of ISAGRO or Seller, the replacement of the product.

To the extent consistent with applicable law, this Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

ISAGRO or its Seller must have prompt notice of any claim so that an immediate inspection of Buyer's or User's claim can be made. To the extent consistent with applicable law, if Buyer and User do not notify ISAGRO or Seller of any claims, in proper time, it shall be barred from obtaining any remedy.

To the extent consistent with applicable law, Buyers and Users are deemed to have accepted the terms of this Limitation of Warranty and Liability, which may not be modified by any verbal or written agreement.

## Tenet WP master label clean 2dec10

ACCEPTED FEB 17 2011

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 80289-9