100-769

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Larry Zang Novartis Crop Protection, Inc. P.O. Box 18300 Greensboro, NC 27419-8300

4 2003

Dear Mr. Zang:

SUBJECT: Medallion

EPA Registration Number 100-769 Your Submission of December 4, 2002

The amendment referred to above, submitted in connection with registration under section (3) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is acceptable provided you make the following changes:

# Storage and Disposal:

- Replace the subheading "Storage" with "Pesticide Storage".
- Add the sentence "Do not contaminate water, food or feed by storage or disposal" immediately following the heading "Storage and Disposal".
- Delete the sentence "Do not contaminate water, food or feed by storage, disposal or cleaning of equipment." from the beginning of the Pesticide Disposal subsection.

## Base Label - Signal Word:

When the "Base Label" section, the text of which is presented on page 20 of the proposed labeling, is printed on the container labeling ensure that the signal word "Caution" and the "Keep out of reach of children" statement appear in a prominent position.

# Base Label - Agricultural Use Requirements Box:

In the "Base Label" section, on page 20 of the proposed labeling, the Agricultural Use Requirements box can be moved from its current position under the ingredient statement so that it follows the Physical and Chemical Hazards statement.

Submit one (1) copy of your final printed labeling before you release the product for shipment. A stamped copy of the label is enclosed for your records.

If you have any questions, please contact Lisa Jones of my staff by phone at (703) 308-9424 or by e-mail at jones.lisa@epa.gov.

Sincerely,

Mary L. Waller

Product Manager (21)

Fungicide Branch

Registration Division (7505C)

Mary L. Walle

		CONC	URRENCES	 	
SYMBOL >	7505C			 	
SURNAME >	Lisa Jones			 	
DATE >	Mar 3, 2003			 	

#### Booklet Label

Medallion®

Fungicide

For control of certain foliar, stem, and root diseases in turfgrass including golf courses, institutional, commercial and residential lawns, sod farms, sports fields, parks, municipal grounds and cemeteries, and of ornamentals grown in interiorscapes, field nursery plantings, container nurseries, forest nurseries, residential and commercial landscapes, greenhouses, lath and shade houses, or other enclosed structures

For control of certain diseases in onions and strawberries

Active Ingredient:

Fludioxonil (CAS No. 131341-86-1)	50.0%_
Other Ingredients:	50.0%
Total:	100.0%

Medallion is a wettable powder.

## KEEP OUT OF REACH OF CHILDREN.

#### CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-769

EPA Est. 67545-AZ-1

Water-soluble Packaging

This outer protective container contains Medallion in eight or sixteen inner water-soluble packets. These inner packets dissolve in water, allowing contents to wet. After opening outer container, immediately dump the required number of unopened inner packets into the partially filled sprayer or mix tank. Do not handle the soluble packets or expose them to moisture, since this may cause rupturing.

Do not offer individual packets for sale.

\_\_x 5 oz \_\_x 1 oz Water-Soluble Packets

ACCEPTED with COMMENTS In EPA Letter Dated:

MAR 4 2003

Under the Federal Insecticite, Fungicide, and Roderal idea & t. as amended, for the pesti ide registered under EPA Reg. Lo.

160-769

Seal	led	Bag	ļS

Do not offer individual sealed bags for sale. Remove required number of sealed bags from box as required for use.

\_\_ x \_\_ LB Bag Wettable Powder

\_\_\_pounds

SCP 769B-M1 0202

Product of Switzerland Formulated in the USA

for 15-20 minutes.  Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.  Call a poison control center or doctor for treatment advice.  Take off contaminated clothing.  Rinse skin immediately with plenty of water for 15-20 minutes.  Call a poison control center or doctor for treatment advice.  Call poison control center or doctor immediately for treatment advice.  Have person sip a glass of water if able to swallow.  Do not induce vomiting unless told to do so by the poison control center or doctor.  Do not give anything by mouth to an unconscious person.  If inhaled  Move person to fresh air.  If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.	FIRST AID		
<ul> <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> <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> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>	If in eyes	<ul> <li>for 15-20 minutes.</li> <li>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</li> </ul>	
<ul> <li>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> </li> <li>If inhaled         <ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul> </li> </ul>	· - · -	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>	
treatment advice.  Have person sip a glass of water if able to swallow.  Do not induce vomiting unless told to do so by the poison control center or doctor.  Do not give anything by mouth to an unconscious person.  Move person to fresh air.  If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.	If swallowed	advice.	
<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>		<ul> <li>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> </ul>	
<ul> <li>Call a poison control center or doctor for further</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 mouth-to-mouth, if possible.</li> </ul>	
treatment advice.  Note to Physician			

If ingested, induce emesis or lavage stomach. Treat symptomatically.

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

# **HOT LINE NUMBER**

For 24 Hour Medical Emergency Assistance for Incidents Involving Human or Animal Exposure Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call

1-800-888-8372

#### PRECAUTIONARY STATEMENTS

## Hazards to Humans and Domestic Animals

# **CAUTION**

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing.

# **Personal Protective Equipment**

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made from any waterproof material
- Shoes plus socks

Follow 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.

## **User Safety Recommendations**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### **Environmental Hazards**

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsates.

## Physical or Chemical Hazards

Do not use or store near heat or open flame.

# CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**IMPORTANT:** Read the entire Directions for Use and Conditions of Sale and Warranty before using this product. If the terms are not acceptable, return the unopened product at once.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitations of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

# **DIRECTIONS FOR USE**

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

NASSAU AND SUFFOLK COUNTIES, NEW YORK: Use is limited to ornamentals grown in interiorscapes, greenhouses, lath and shade houses, containers, or other enclosed structures.

## 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 12 hours. Exception: If the product is applied by drenching, 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
- Chemical-resistant gloves made from any waterproof material
- Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter treated areas without protective clothing until sprays have dried.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL OR PLANT INJURY.

#### STORAGE AND DISPOSAL

## Storage

Store in a cool, dry place. Do not store this product under wet conditions. Handle outer container carefully to avoid breakage of inner soluble packets.

## Pesticide Disposal

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

# **Container Disposal**

Do not reuse outer container. Dispose of empty outer container in a sanitary landfill or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

# **GENERAL INFORMATION**

# **Mixing Instructions**

Prepare no more mixture than is needed for the immediate operation. Thoroughly clean the spray equipment before using Medallion. Vigorous agitation is necessary to maintain uniformity of the spray mixture. Maintain maximum agitation throughout the spraying operation. It is not recommended that the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

To determine the physical compatibility of Medallion with other products, use a jar test, as described below.

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

To determine biological compatibility with other products, mix the products in the desired proportions, apply per label directions on a small area or small number of plants for phytotoxicity prior to widespread use.

If using Medallion in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. No label dosage rate should be exceeded and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing. Tank mixtures are permitted only in those states where the tank mix partner is registered.

Note: Use with oils or adjuvants may cause plant damage.

**Note:** Do not let the spray mixture stand overnight in the spray tank. Rinse the spray tank at the end of the day.

# Wettable Powder

**Medallion Alone:** Add 1/3 of the required amount of water to the spray or mixing tank. With the agitator running, open the package and add the Medallion to the tank. Continue agitation while adding the remainder of the water. Begin application of the spray solution after Medallion has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**Medallion + Tank Mixtures:** Medallion is usually compatible with Banner® MAXX®, Subdue® MAXX, and other commonly used fungicides, insecticides, and foliar nutrient products. However, the physical and biological compatibility of Medallion with tank mix partners should be tested before use. If in doubt, run a "jar compatibility test" or consult

with Syngenta company representatives, other users, university or extension personnel before proceeding.

Add 1/3 of the required amount of water to the spray or mixing tank. With the agitator running, open the package and add the Medallion to the tank. Continue agitation while adding the remainder of the water. Allow the product to completely disperse into the mix water. Then add the desired amount of other products recommended for tank mixture. In general, tank mix partners should be added in this order: wettable powders, wettable granules (dry flowables), liquid flowables, liquids, and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product. Continue agitation to maintain a uniform suspension until atl of the spray solution has been applied.

# Water-Soluble Bags

**Medallion Alone:** Add 1/3 of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of unopened soluble packets of Medallion into the spray tank all at once. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the packets have dissolved, and the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**Medallion + Tank Mixtures:** Medallion is usually compatible with Banner® MAXX®, Subdue® MAXX, and other commonly used fungicides, insecticides, and foliar nutrient products. However, the physical and biological compatibility of Medallion with tank mix partners should be tested before use. If in doubt, run a "jar compatibility test" or consult with Syngenta company representatives, other users, university or extension personnel before proceeding.

Add 1/3 of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble packets of Medallion into the tank all at once. Continue agitation while adding the remainder of the water. Allow the packets of Medallion to dissolve and the product to completely disperse into the mix water. Then add the desired amount of other products recommended for tank mixture and allow them to become completely dispersed. Continue agitation to maintain a uniform suspension until all of the spray solution has been applied.

Precaution: Water-soluble packets of Medallion and any other products packaged in water-soluble film, must be completely dissolved and dispersed in water before any other tank mix partner, including micronutrients or other liquid or dry fertilizers, are added to the spray solution.

Application Instructions for Use in Irrigation Systems (For applications of Medallion as soil drench applications only. Do not use in overhead irrigation systems.)

Do not apply Medallion to onions and strawberries through irrigation systems.

**Microjet or Drip Irrigation Application:** Medallion alone or in tank mixture with other pesticides which are registered for microjet or drip application may be applied in

irrigation water at rates recommended on this label. Apply this product only through a microjet or drip irrigation system. Do not apply this product through any other type of irrigation system. Plant injury or lack of effectiveness can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension 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. 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.

# **Operation Instructions**

- 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 backflow. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing 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, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 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. Avoid spray overlap as injury may result.
- 8. Prepare a mixture of Medallion with clean water in the mix (supply) tank. The mix (supply) tank should be set up to provide vigorous agitation. Make a slurry of Medallion and water. Use a minimum of 1 gal. of water to one packet of Medallion.

Fill the mix (supply) tank with the required amount of water. Start agitation in the tank. Add all of the required wettable powder from the sealed Medallion bag or all of the required water-soluble packets of Medallion at the same time. Agitate the solution until all of the water-soluble packets have dissolved and the Medallion has completely dispersed into the solution. Maintain agitation in the tank and inject this mixture into the irrigation system. Injecting a larger volume of a more dilute mixture per hour will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep the fungicide in suspension.

- 9. Meter into irrigation water during the beginning of the irrigation cycle.
- 10. With microjet systems, apply additional water after irrigation is completed to remove residues from the foliage. Apply enough supplemental water to wet the root zones of the plants.

Precaution for irrigation applications: Where distribution patterns do not overlap sufficiently, unacceptable control may result. Where distribution patterns overlap excessively, injury to desirable plants may result.

# **TURFGRASS**

Medallion is a protectant fungicide for control of certain diseases of turfgrass. Medallion provides control of brown patch, leaf spot, yellow patch, summer patch, bentgrass dead spot, and pink and gray snow mold when used in an integrated, preventive disease management program. For control of other diseases of turfgrass such as Pythium blight, yellow tuft, and downy mildew, use Subdue MAXX.

## DO NOT USE ON TURFGRASS IN HAWAII.

- 1. USE MEDALLION AS A FOLIAR SPRAY IN AN INTEGRATED, PREVENTIVE DISEASE MANAGEMENT PROGRAM ALONE OR IN COMBINATION WITH OTHER FUNGICIDES SUCH AS BANNER MAXX, OR SUBDUE MAXX.
- 2. Apply in sufficient water to ensure thorough coverage.
- 3. Apply after mowing.
- 4. For control of foliar diseases, allow sprayed area to completely dry before irrigation.

- 5. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval.
- 6. For optimum turfgrass quality and disease control, use Medallion in conjunction with turfgrass management practices that promote good plant health and optimum disease control.
- 7. Before use of any fungicide, proper diagnosis of the organism causing the disease is important. Use of diagnostic kits or other means of identification of the disease is essential to determine the best control measures.

**Notes:** (1) To avoid possible illegal residues, do not graze animals on treated areas, and (2) do not feed clippings from treated areas to livestock or poultry. (3) **Note**: Do not apply more than 1.5 oz./1,000 ft.²/year (4 lbs. product/A/year) on turfgrass.

# **Turfgrass Disease Control with Medallion**

Disease	Rate product/ 1,000 ft. <sup>2</sup> *see chart	Application Interval	Instructions
Brown Patch (Rhizoctonia solani)	0.20 - 0.25 oz.	7 days	Begin applications prior to disease development. For extended and more broad spectrum disease control (up to 21 days), including dollar spot, tank mix 0.20 -0.5 oz. of Medallion with 1.0-2.0 fl. oz. of Banner MAXX per 1,000 ft. <sup>2</sup>
	0.50 oz.	14 days	7
Bentgrass Dead Spot (Ophiosphaerella agrostis)	0.3-0.5 oz.	14 days	Begin applications prior to disease development. For more broad spectrum disease control, including dollar spot and anthracnose, tank mix Medallion with 1.0-2.0 fl. oz. of Banner MAXX per 1,000 ft. <sup>2</sup>
Leaf Spot (Bipolaris spp., Drechslera spp.)	0.25-0.5 oz.	14-21 days	Apply when conditions are favorable for disease development.
Summer Patch (Magnaporthe poae)	0.5 oz.	14 days	Apply when conditions are favorable for disease development. For best disease control, tank mix 0.3-0.5 oz. of Medallion with 1.0-2.0 ft. oz. of Banner MAXX per 1,000 ft. <sup>2</sup>
Yellow Patch (Rhizoctonia cerealis)	0.5 oz.	Late Fall	Apply one application in late fall before snow cover. For best disease control, tank mix with 1.0-2.0 fl. oz. of Banner MAXX per 1,000 ft. <sup>2</sup>
Snow Mold: Gray - (Typhula incarnata), Pink (Microdochium nivale)	0.5 oz.	Late Fall	Apply one to two applications in late fall before snow cover. Do not apply on top of snow. For best disease control, tank mix with one to two registered snow mold products. For example, mix with a combination of Banner MAXX and Daconil Ultrex. Medallion at 0.25 - 0.3 oz rate can be used when used when tank mixing with Banner MAXX and Daconil when disease conditions are expected to be light to moderate

#### \*Medallion Conversion Chart

Rate Product/1,000 ft. <sup>2</sup>	Treated Area ft.2/1 oz. Packet	Treated Area ft.2/5 oz. Packet
0.20 oz.	5,000	25,000
0.25 oz.	4,000	20,000
0.30 oz.	3,340	16,700
0.50 oz.	2,000	10,000

## **ORNAMENTALS**

Medallion is a protectant fungicide for control of certain foliar, stem, and root diseases in ornamentals grown in interiorscapes, field nursery plantings, container nurseries, forest nurseries, residential and commercial landscapes, greenhouses, lath and shade houses, or other enclosed structures.

**HAWAII ONLY:** For use only on ornamentals grown in containers, greenhouse or other enclosed structures.

Medallion controls foliar diseases of ornamentals caused by *Rhizoctonia* spp., *Botrytis* spp., *Cercospora* spp., *Alternaria* spp., *Septoria* spp., and *Myrothecium* spp. when applied on a regular schedule as a full coverage spray.

Medallion also will provide control of stem and root diseases caused by *Rhizoctonia* spp., *Fusarium* spp. (e.g., oxysporum), *Cylindrocladium* spp., *Sclerotium* spp., and *Thielaviopsis* spp., when mixed with the potting media or as a drench to the root zone of plants.

For control of stem and root diseases caused by *Pythium* spp. and *Phytophthora* spp., tank mix Medallion with labeled rates of Subdue MAXX. See mixing instructions for these tank mixes.

## Maximum Use Rates

For indoor drench applications, use up to 30 oz. of Medallion per 1,000 sq. ft. (80 lbs. product/A) per year or crop cycle. Applications to pre-potting mix can be made up to 4 oz. of Medallion per cu. yd.

The high use rates recommended for container nurseries, greenhouses, or other enclosed structures are due to the high organic matter soil mixes used in these systems and the high binding affinity of Medallion for organic matter.

For field grown and landscape ornamentals, apply up to a maximum of 1.5 oz./1,000 ft.²/year (4 lbs. product/A/year). For outdoor container grown ornamentals, apply up to a maximum of 3 oz./1,000 ft.²/year (8 lbs. product/A/year).

## **Plant Species**

Medallion has been tested and found to be safe on the ornamentals listed in this table at recommended rates. For plants not listed in the table, see the "Notice to User" box at the bottom of the table. Numbers in parentheses refer to diseases controlled. See Table 1.

African Violets (1-12) Ageratum (1-10) Alyssum (1-12) Aster (1-12) Azalea (4, 11, and 12) Begonia (1-12) Bleeding Heart\* (1-12) Bridal Veil\* (1-12) Caladium (1-12) Carnation (1-12) Calendula (1-12) Celosia (1-12) Centrosa\* (1-12) Chenille\* (1-12) Christmas Cactus (1-12) Chrysanthemums (1-12) Coleus (1-12) Coreopsis\* (1-12) Cyclamen (1-12) Daisy\* (1-12) Dahlia\* (1-12) Fern (1-12) \*\* Fuchsia\* (1-4) Gerbera Daisy (1-12) Gomphrena (1-12) Lantana\* (1-12) Lysianthus (8-12) Marigold (1-12) Mexican Heather\* (1-7) Nephthytis\* (1-12) Pansy (1-12) Petunia (1-12) Pittosporium (8-12) Poinsettia (1,4,9-12) Portulaca\* (1-12) Pothos (1-12) Rose (1, 4, and 9) Salvia (1-12) Snapdragon (1-12) Spathiphyllum (1-12) Sunflower\* (1-12)

Tobacco, flowering\* (1-12)

Verbena (1-12) Vinca (1-12) Wandering Jew\*(1-12) Zinnia (1-12)

\*Indicates that only foliar applications have been tested for plant safety.

\*\*Do not apply Medallion to leather leaf fern

#### Note:

- Drench or at seedling applications to impatiens or New Guinea Impatiens may cause stunting and/or chlorosis.
- Foliar or drench applications to some geranium varieties may cause stunting or chlorosis at higher rates. Responses may vary depending on environmental conditions. Medallion should be tested on a limited area to evaluate for any possible damage before proceeding with treatment of the entire crop.

**NOTICE TO USER:** Plant tolerance to Medallion has been found to be acceptable for the specific genera and species listed on this label. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to Medallion. Neither the Manufacturer nor the Seller has determined whether or not Medallion can be used safely on ornamental plants not specified on this label. The professional user should determine if Medallion can be used safely prior to commercial use. In a small area, test the recommended rates on a small number of plants for phytotoxicity prior to widespread use.

# Table 1: Diseases Controlled by Medallion

#### **Foliar Diseases**

- 1. Aerial Blight (*Rhizoctonia* spp.)
- 2. Alternaria Leaf Blight (*Alternaria* spp.)
- 3. Alternaria Leaf Spot (Alternaria spp.)
- 4. Botrytis Blight (Botrytis spp.)
- 5. Cercospora Leaf Spot (Cercospora spp.)
- 6. Myrothecium Leaf Spot and Blight (*Myrothecium* spp.)
- 7. Septoria Leaf Spot (Septoria spp.)

## Stem, Crown, and Root Rots

- 8. Cylindrocladium Stem and Root Rot (Cylindrocladium spp.)
- 9. Fusarium Stem and Root Rot (Fusarium spp.)
- 10. Rhizoctonia Stem and Root Rot (Rhizoctonia spp.)
- 11. Southern Blight (Sclerotium rolfsii)
- 12 Black Root Rot (*Thielaviopsis* spp.)

## **FOLIAR SPRAY**

For control of *Rhizoctonia* spp., *Alternaria* spp., *Septoria* spp., *Myrothecium* spp., and *Cercospora* spp., use 1-2 oz 100 gals. of water and spray to runoff at 7 to 14-day intervals while conditions are favorable for disease development

For control of *Botrytis* spp., use 2-4 ounces/ 100 gals.of water and spray to runoff at 7 to 14-day intervals while conditions are favorable for disease development. For management of the potential development of resistance in the *Botrytis* population, use no more than two consecutive applications of Medallion before rotating to another effective product registered for *Botrytis* control on ornamentals with a different mode of action.

**Notes:** (1) Under severe conditions, use the highest rate and/or the shortest application interval. (2) Use sufficient spray volume to wet the plants to the point of drip. (3) For a single foliar application, apply up to a maximum of 4 ounces/100 gals. (1 ounce/25 gals.).

## PRE-POTTING GROWING MEDIA MIX

Medallion can be mixed with the potting media before seeding or transplanting by uniformly mixing 1-2 oz. per cu. yd. of potting media. The desired amount of Medallion should be mixed with 0.5-1 gal. of water and applied to 1 (one) cu. yd. of potting media. It is recommended that Medallion treatment should be made just before the plants are seeded or potted up. Uniform mixing can be accomplished by placing the potting mix in a rotating drum and spraying the Medallion solution onto the mix while the drum is rotating.

## **GROWING MEDIUM DRENCH**

## At Seeding

For the control of damping-off, root, and stem diseases, mix 1 oz/100 gals. of water. When using Medallion for control of *Rhizoctonia* spp., apply sufficient mix to wet the upper one-half of the growing medium. For control of other root and stem diseases, completely drench the growing medium. Make only one application to the seeding crop prior to transplanting or transfer to larger containers.

# Transplants and Cuttings

For the control of root and stem diseases, mix 1-2 oz/100 gals. of water. When using Medallion for control of *Rhizoctonia* spp., apply sufficient mix to wet the upper one-half of the growing medium. For control of other root and stem diseases, completely drench the growing medium. If needed, retreat transplants and cuttings with Medallion as described above at 21 to 28-day intervals. Two applications per year during conditions favorable for disease development are usually adequate to control diseases of ornamentals.

**Notes:** (1) Under severe conditions, use the highest rates and/or the shortest application interval. (2) For control of *Pythium* and *Phytophthora* diseases in addition to *Rhizoctonia* spp., *Cylindrocladium* spp., *Thielaviopsis* spp., *Fusarium* spp., and *Sclerotium* spp., tank mix Medallion with labeled rates of Subdue MAXX. (3) Drench applications can be made at up to a maximum of 2 pts./sq. ft. to wet the root zone of plants.

Onions (Dry Bulb, Green, & Onions grown for seed)

Apply 8 oz /A for control of Botrytis Leaf Blight (*Botrytis spp.*) and Purple Blotch (*Alternaria porri*). Begin applications when conditions become favorable for disease but before infection. If favorable conditions persist, make additional applications on a 7-10 day interval. Make up to 4 applications.

Do not apply within 7 days of harvest

#### Strawberries

Apply 8 oz /A for control Gray Mold (*Botrytis cinerea*). Begin applications at or before bloom and continue on a 7-10 day interval. Make up to 4 applications. Apply no more than 2 applications before switching to a registered fungicide with a different mode of action.

Preharvest interval is 0 day.

Note: Do not plant any crop other than strawberries or onions within 30 days after the last application.

Banner® MAXX®, Medallion®, and Subdue® MAXX® and the Syngenta logo are trademarks of a Syngenta Group Company U.S. Patent Nos. 4,151,299; 4,705,800

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For non-emergency (e.g. current product information) call Syngenta Crop Protection at 1-800-334-9481.

Product of Switzerland

Formulated in the USA

Syngenta Crop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

SCP 769B-M1 0202

HISTORIC FILE NAME: [Z/LABELM-W/MED769B-M1 0202 - ccg - 2/12/02 MED 769B-M1 0202 MAS.doc - jda - 09/05/2002

revised nsp 8/6/02 to incorporate EPA changes (in red) Revised Iz 11/20/02 to remove CA restriction Revised Iz 1/28/03 for NY use BASE LABEL

Medallion®

Fungicide

For control of certain foliar, stem, and root diseases in turfgrass including golf courses, institutional, commercial and residential lawns, sod farms, sports fields, parks, municipal grounds and cemeteries, and of ornamentals grown in interiorscapes, field nursery plantings, container nurseries, forest nurseries, residential and commercial landscapes, greenhouses, lath and shade houses, or other enclosed structures

Active Ingredient:

Fludioxonil (CAS No. 131341-86-1)	50.0%
Other Ingredients:	50.0%
Total:	100.0%

Medallion is a wettable powder.

See additional precautionary statements and directions for use in attached booklet.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-769

EPA Est. 67545-AZ-1

SCP 769B-M1 0202

\_\_x 5 oz
\_\_x 1 oz

Water-Soluble Packets
\_\_x \_\_ LB Bag Wettable Powder

KEEP OUT OF REACH OF CHILDREN.

**CAUTION** 

# **Precautionary Statements**

# **Hazards to Humans and Domestic Animals**

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing.

	FIRST AID
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>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 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>
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>

If ingested, induce emesis or lavage stomach. Treat symptomatically.

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

# **HOT LINE NUMBER**

For 24 Hour Medical Emergency Assistance for Incidents
Involving Human or Animal Exposure
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),
Call

1-800-888-8372

## **Environmental Hazards**

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsates.

# Physical or Chemical Hazards

Do not use or store near heat or open flame.

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SCP 769B-M1 0202

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