

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

OCT 2 6 2007

Adora Clark, Ph.D. Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, NC 27419

SUBJECT: Label Amendment per Agency Letter Dated July 27, 2007 Countdown L & G EPA Reg. No. 50534-216

Your Submission Dated August 24, 2007

Dear Dr. Clark:

In a letter dated July 27, 2007 the Agency requested that you add use site restriction language to the label for Chlorothalonil. The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided that you.

- 1. Make the following changes to the label:
  - On page 1, in the first aid section, subheading "If Swallowed", move the sentence "Call poison control center.....treatment advice." to the end of the section.

Submit one copy of your final printed labeling before you release the product for shipment.

# Countdown® L&G

For control of agricultural, turf and ornamental diseases

Active Ingredient:

Chlorothalonil (tetrachloroisophthalonitrile)	40.4%
Other Ingredients:	59.6%
Total:	100.0%

Contains 4.16 Pounds Chlorothalonil per Gallon (500 grams per liter)

## KEEP OUT OF REACH OF CHILDREN.

## WARNING/AVISO

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

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 50534-216 EPA Est.

SCP 50534-216X XXX XXXX

XX gallons Net Contents

with COMMENTS In EPA Letter Dated

Under the Federal Insecticide, Fundicide, and Redenticide Act as amended, for the posticide registered under EPA Reg. No. 50534-216

<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>
<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. Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<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>
<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>

# Note to Physician

Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

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

#### WARNING/AVISO

May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Do not breathe spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

# Mixers, Loaders, Applicators and all other handlers must wear:

- · long-sleeved shirt and long pants
- · chemical resistant gloves made of any waterproof material
- shoes plus socks
- NIOSH approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with any N, R, P or HE filter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them. 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.

## **Engineering Control Statements**

When handlers use closed systems, enclosed cab, or aircraft 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.

# **User Safety Recommendations**

## Users should:

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

## **Environmental Hazards**

This product is toxic to aquatic invertebrates and wildlife. Do not apply directly to water, -to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE**: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

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 GB Biosciences Corporation or Seller. To the extent allowed by applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold GB Biosciences and Seller harmless for any claims relating to such factors.

GB Biosciences 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 this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or GB Biosciences, and Buyer and User assume the risk of any such use. GB BIOSCIENCES MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

IT IS GB BIOSCIENCES' AND SELLER'S INTENTION THAT in no event shall GB Biosciences or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT ALLOWED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF GB BIOSCIENCES 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 GB BIOSCIENCES OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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

#### DIRECTIONS FOR USE

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

Countdown L&G should be used only in accordance with recommendations on this label or in separately published GB Biosciences supplemental labeling recommendations for this product.

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

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

- coveralls
- chemical resistant gloves made of any waterproof material
- shoes plus socks
- protective evewear

Special Eye Irritation Provisions: This product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6.5 days entry is permitted only when the following safety measures are provided:

- (1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS-required decontamination site intended for workers entering the treated area.
- (2) Workers must be informed, in a manner they can understand:
- that residues in the treated area may be highly irritating to their eyes
- that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes
- that if they do get residues in their eyes, they should immediately flush their eyes
  using the eyeflush container that is located at the decontamination site or using
  other readily available clean water
- how to operate the eyeflush container

# Non-Agricultural Uses

For use to control diseases on turf on golf courses, lawns around commercial and industrial buildings, and professional and collegiate athletic fields.

For use to control diseases on ornamentals on golf courses and landscape areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

#### 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 or allow others to enter the treated area until sprays have dried.

#### STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

# **Pesticide Storage**

Store in a cool place. Protect from excessive heat.

## Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of federal law. If these wastes cannot be disposed of by use 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.

## **Container Disposal**

DO NOT reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by alternative methods allowed by state and local authorities.

#### **GENERAL INFORMATION**

Countdown L&G is an excellent disease control agent when used according to label directions for control of a broad spectrum of plant diseases. Countdown L&G is recommended for use in programs which are compatible with the principles of

Integrated Pest Management (IPM), which include the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems which reduce unnecessary applications of pesticides.

Countdown L&G is effective for strategic use in programs that attempt to minimize disease resistance to fungicides. Some other fungicides which are at risk of disease resistance exhibit a single-site mode of fungicidal action. Countdown L&G, with a multisite mode of action, may be used to delay or prevent the development of resistance to single-site fungicides. Consult with your federal or state Cooperative Extension Service representatives for guidance on the proper use of Countdown L&G in programs which seek to minimize the occurrence of disease resistance to other fungicides.

#### **GENERAL PRECAUTIONS AND RESTRICTIONS**

Do not use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, playfields, recreational park athletic fields, athletic fields located on or next to schools (ie., elementary, middle and high schools), campgrounds, churches and theme parks.

Agricultural Use Sites Only (sod farms, farms, forests, nurseries and greenhouses): This product must not be applied within 150 feet (for aerial and airblast applications) or 25 feet (for ground applications) of marine/estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the water body.

DO NOT use Countdown L&G on agricultural crops, i.e. Field and Row Crops as listed below, when grown in a greenhouse. Countdown L&G may be used on greenhouse grown Ornamentals, as listed below. Do not apply Countdown L&G through high pressure spray equipment. DO NOT use mistblowers, cold fog, or other fogging application equipment when making applications of Countdown L&G in greenhouses.

DO NOT combine Countdown L&G in the spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and non-injurious under your conditions for use. DO NOT combine Countdown L&G with Dipel<sup>®</sup>, Latron B-1956<sup>®</sup> or Latron AG-98<sup>®</sup>, Chipco<sup>®</sup> Signature™, horticultural oil, and products containing xylene as phytotoxicity may result from the combination when applied to some species on this label. DO NOT use Copper Count<sup>®</sup> N in concentrated spray suspensions.

## **Spray Drift Precautions**

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

The following drift management requirements must be followed to avoid off target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

# **Aerial Drift Reduction Advisory Information**

[This section is advisory in nature and does not supercede the mandatory label requirements.]

#### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable conditions (See Wind, Temperature).

## **Controlling Droplet Size**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting the nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With
  most nozzle types, narrower spray angles produce larger droplets. Consider using
  low-drift nozzles. Solid stream nozzles oriented straight back produce the largest
  droplets and the lowest drift potential.

#### **Boom Length**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

# **Application Height**

Applications should not be made at a height greater than 10 ft. above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

## **Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

# **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

# **Sensitive Areas**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

# **APPLICATION**

**Note:** Slowly invert container several times to assure uniform mixture.

The required amount of Countdown L&G should be added slowly into the spray tank during filling. Shake container periodically after filling spray tank and during spray operation to maintain uniform suspension. With concentrate sprays, premix the required amount of Countdown L&G in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations.

Apply Countdown L&G in sufficient water to obtain adequate coverage of foliage. Gallonage to be used will vary with crop and amount of plant growth.

For field and row crops, spray volume usually will range from 20 to 150 gals. per acre for dilute sprays and 5 to 10 gals. per acre for concentrate ground spray and aircraft applications.

For tree and orchard crops, apply Countdown L&G in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

Application through sprinkler irrigation systems is not recommended unless specific directions are given for a crop. See application and calibration instruction below.

# Application and Calibration Techniques for Sprinkler Irrigation - Chemigation

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set and portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may 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 apply this product through irrigation systems connected to a public water system. '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 per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for

its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the source.

Always inject Countdown L&G into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

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 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.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

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.

Countdown L&G may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

# A. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line Venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired

amount of Countdown L&G for acreage to be covered with water so that the total mixture of Countdown L&G plus water in the injection tank is equal to the quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. Agitation is recommended. Countdown L&G can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until Countdown L&G has been cleared from last sprinkler head.

# B. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

For injection of pesticides, these continuously moving systems must use a positive displacement injection pump, of either diaphragm or piston type, constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Thoroughly mix recommended amount of Countdown L&G for acreage to be covered into same amount of water used during calibration or run. Mixture in the chemical tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until Countdown L&G has been cleared from last sprinkler head.

# **Directions for Application**

Note: Application rates on this label for small areas are provided as Fluid Ounces per 1,000 sq. ft. of treated crop area, not as oz. in weight. One fl. oz. weighs 1.3 dry oz.

CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
Asparagus	Rust (Puccinia asparagi)  Purple Spot (Pleospora herbarum)  Cercospora blight (C. asparagi)	1-2 oz.	2% to 5% pts.	Use water volumes of 25-50 gallons per acre. Begin applications following final harvest of spears. Repeat applications at 14-28 day intervals (the minimum retreatment interval is 14 days), depending on disease pressure. Use the higher rate and shorter interval if disease severity begins to increase during the season or weather conditions are conducive for severe epidemics.  Apply by ground.

Specific Use Restrictions: Do not apply more than 17 pints Countdown L&G (9.0 lbs. a.i.) per acre (6 fl. oz./1,000 sq. ft.) during each growing season. Do not apply within 190 days (120 days in CA and AZ) of the harvest of spears in the following season.

Bean (Snap)	Rust ( <i>Uromyces</i> appendiculatus)	¾-1½ oz.	2 to 41/4 pts.	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens and report as processes (the minimum and report as processes (the minimum and report as processes).
	Botrytis blight (gray mold) ( <i>B. cinerea</i> )	1½ oz.	41/4 pts.	and repeat as necessary (the minimum retreatment interval is 7 days) to maintain control.  Apply by ground, air or chemigation.

**Specific Use Restrictions:** Do not apply more than 17 pints Countdown L&G (9.0 lbs. a.i.) per acre (6 fl. oz./1,000 sq. ft.) during each growing season. Do not apply within 7 days of harvest.

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CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
Beans (Dry) (except soybeans) bean, adzuki bean, proad bean, dry bean, lablab bean, navy bean, kidney bean, lima bean, moth bean, moth bean, pinto bean, pinto bean, tepary bean, urd bean, yardlong catjang chickpea (garbanzo) cowpea lupin, grain lupin bean, rice bean, runner bean, jackbean pea, blackeyed pea, southern	Rust (Uromyces appendiculatus)  Anthracnose (Colletotrichum lindemuthianum)  Downy mildew Phytophthora nicotianae  Cercospora leaf blotch (C. cruenta)   Ascochtyta blight (A. phaseolorum)	3/4-1 oz.	2 to 2¾ pts.	Use in sufficient water to obtain adequate coverage. Begin applications at first onset of disease, which may occur as early as 2 to 4 weeks before flowering. Repeat applications at 7 to 10 day intervals (the minimum retreatment interval is 7 days). For use only on beans to be harvested dry with pods removed.  Apply by ground, air or chemigation.
Specific Use R oz./1,000 sq. ft.	estrictions: Do not ap ) during each growing s	ply more than 1 season. Do not a	1.5 pints Count apply within 14	tdown L&G (6 lbs. a.i.) per acre (4.25 fl. days before harvest.
Blueberries	Suppression:  Anthracnose (ripe rot) (C. gloeosporoides)  Mummy Berry (M. vacciniicorymbosi)	1½ -2 oz.	41/4 to 53/4 pts.	Countdown L&G should be integrated into an overall disease management strategy which includes alternation with a fungicide with a different mode of action. Diseases may only be suppressed and russetting may occur under heavy disease pressure or unfavorable environmental conditions.  Apply in sufficient water to obtain adequate coverage, normally 20-100 gallons per acre. Begin applications at budbreak (green tip) and repeat at 10-day intervals through early bloom (the minimum re-treatment interval is 10 days). Under heavy disease pressure, use the higher rate.

Apply by ground or air.

CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
	Septoria leaf spot (Septoria albopunctata) Rust (Pucciniastrum vaccinii)	1½ -2 oz.	4¼ to 5¾ pts.	Foliar Use After Harvest (after all berries are harvested): To maintain healthy leaves for the following season, apply in sufficient water to obtain adequate coverage (normally 20-100 gallons per acre). Repea at 10-14 day intervals (the minimum retreatment interval is 10 days).  Apply by ground or air.

Specific Use Restrictions: Do not apply more than 17 pints Countdown L&G (9.0 lbs. a.i.) per acre (6 fl. oz./1,000 sq. ft.) during each growing season. Do not apply after full bloom (except for foliar use after harvest) or within 42 days of harvest.

Cabbage Chinese Cabbage (tight- headed varieties only) Cauliflower Broccoli Chinese	Alternaria leaf spot (Alternaria spp.)  Downy mildew (Peronospora parasitca)	¾ oz.	2¼ pts.	Use in sufficient water to obtain adequate coverage. Begin applications after transplants are set in field, or shortly after emergence of field-seeded crop, or when conditions favor disease development. Repeat at 7 to 10 day intervals (the minimum re-treatment interval is 7 days) to maintain control.  Apply by ground, air or chemigation.
Broccoli Brussels Sprouts	Ring spot (California only)	1 oz.	2¾ pts.	For field-seeded Brussels sprouts, begin applications at time of early sprout development or when conditions favor disease development. Repeat at 7 to 10 day intervals (the minimum re-treatment interval is 7 days) to maintain control.

Specific Use Restrictions: Do not apply more than 23 pints Countdown L&G (12 lbs. a.i.) per acre (8.5 fl. oz./1,000 sq. ft.) during each growing season. Do not apply within 7 days of harvest.

Carrot	Cercospora leaf spot (C. carotae)  Alternaria leaf blight	³⁄-1 oz.	21/4 to 23/4 pts.	Use in sufficient water to obtain adequate coverage. Start applications when disease threatens and repeat at 7 to 10 day intervals (the minimum re-treatment interval is 7 days) to maintain control.
	(A. dauci)			Apply by ground, air or chemigation.

**Specific Use Restrictions:** Do not apply more than 29 pints Countdown L&G (15 lbs. a.i.) per acre (10.5 fl. oz./1,000 sq. ft.) during each growing season. Countdown L&G may be applied the day of harvest.

Celery	Early blight (Cercospora apii)  Late blight (Septoria apicola)  Basal stalk rot (Rhizoctonia solani)	1-1½ oz.	2¾ to 4¼ pts.	Use in sufficient water to obtain adequate coverage. Start applications when transplants are set in the field and repeat at a 7 day interval as needed to maintain control (the minimum re-treatment interval is 7 days).  Apply by ground, air or chemigation.
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CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
	Suppression (7 day schedule): Pink rot (Sclerotinia sclerotiorum)	1½ oz.	4½ pts.	
	Early blight (Cercospora apii)  Late blight (Septoria apicola)		2¼ to 2¾ per 100 gal.	For celery seedbeds, apply in a spray volume of 125 gallons per acre twice weekl or as needed to maintain control. Start applications shortly after crop emergence. Use the higher rate under severe disease conditions.
	lestrictions: Do not ap ) during each growing :			tdown L&G (18 lbs. a.i.) per acre (13 fl. days of harvest.
Corn (Sweet), Corn (Grown for seed)	Helminthosporium leaf blights Rust ( <i>Puccinia</i> spp.)	½-1 oz.	1 % to 2 % pts.	Use in sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development and repeat at a 7 day interval as required to maintain control (the minimum re-treatment interval is 7 days). Under severe disease conditions, use 2½ to 2¾ pints Countdown
	Į.	{		L&G per acre.
		• .		Apply by ground, air or chemigation.
sq. ft.) during ea	ach growing season. D	o not apply with	in 14 days of h	
sq. ft.) during ea	ach growing season. D	o not apply with	in 14 days of h	Apply by ground, air or chemigation.  own L&G (9 lbs. a.i.) per acre (6 fl. oz./1,000 arvest. Do not apply to sweet corn to be

**Specific Use Restrictions:** Do not apply more than 29 pints Countdown L&G (15 lbs. a.i.) per acre (10.5 fl. oz./1,000 sq. ft.) during each growing season. Do not apply within 50 days of harvest. Do not apply to beds when flooded or allow release of irrigation water from beds for at least 3 days following application.

CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
Cucurbits Cucumber Cantaloupe Muskmelon Honeydew melon Watermelon Squash Pumpkin	Anthracnose (Colletotrichum spp.)  Downy mildew (Pseudoperonospora cubensis)  Target spot (Corynespora cassiicola)  Cercospora leaf spot (C. citrullina)  Gummy stem blight /vine decline (Didymella bryoniae)  Alternaria leaf blight (A. cucumerina)  Alternaria leaf spot (A. alternata)  Scab (Cladosporium cucumerinum)  Powdery mildew (Sphaerotheca only)	%-1 oz.	2½ to 2½ pts.	Use in sufficient water to obtain adequate coverage. Begin applications when plants are in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7 day intervals (the minimum re-treatment interval is 7 days).  Note: Spraying mature watermelons may result in sunburn of the upper surface of the fruit. Do not apply Countdown L&G to watermelons when any of the following conditions are present:  1. Intense heat and sunlight 2. Drought conditions 3. Poor vine canopy 4. Other crop and environmental conditions which may be conducive to increased natural sunburn  Do not combine Countdown L&G with anything except water for application to watermelons unless your prior use has shown the combination to be non-injurious to watermelons under your conditions of use.  Apply by ground, air or chemigation.

**Specific Use Restrictions:** Do not apply more than 30 pints Countdown L&G (15.75 lbs. a.i.) per acre (11 fl. oz./1,000.sq. ft.) during each growing season. Countdown L&G may be applied the day of harvest.

Grasses Grown for	Stem·rust	½-¾ oz.	1½ to 2¼ pts.	Use in sufficient water to obtain adequate coverage. Begin applications during stem
Seed	Leaf rust		) p.o.	elongation when conditions favor disease development. Re-apply at flag (top) leaf
٠	Stripe rust			emergence and repeat applications at 14
	Septoria leaf spot			day intervals (the minimum re-treatment interval is 14 days).
	Glume blotch			Apply by ground, air or chemigation.
	Bipolaris and Drechslera leaf spots			
	Selenophoma (eyespot)	½-1 oz.	1½ to 2¾ pts.	

CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
oz./1,000 sq. ft	.) during each growing	season. Do not	apply within 14	down L&G (4.5 lbs. a.i.) per acre (3 fl. days of harvest. Do not allow livestock to of treated plant parts after harvest of seed is
Mango	Anthracnose (Colletotrichum spp.)	1-1% oz.	2¾ to 5 pts.	Use a water volume of 20 to 300 gallons per acre. Begin applications at early bloom and repeat on a 7-14 day interval until early fruit development. Begin the season with the 2¾ pint rate on a 14-day interval (the minimum re-treatment interval is 7 days). If disease pressure is severe, use the higher rate and shorter interval.  Apply by ground or air.
	Restrictions: Do not ap			own L&G (24 lbs. a.i.) per acre (17 fl days of harvest.
Mint (Indiana, Michigan and Wisconsin only)	Rust (Puccinia menthae)  Septoria leaf spot (S. menthae)	¾ oz.	2 pts.	Use in sufficient water to obtain adequate coverage, normally 20 to 150 gallons per acre for dilute sprays and 5 to 10 gallons per acre for concentrate applications. Begin applications when emerging plants are 4-8 inches high. Repeat applications at 7 to 10 day intervals to maintain control (the minimum re-treatment interval is 7 days).

CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APF	PLICATION	DIRECTIO	NS	
Onion (Dry bulb) and Garlic	Botrytis leaf blight (Botrytis spp.)  Purple blotch (Alternaria porri)  Suppression:	1/2-11/2 OZ.	1½-4¼ pts.	recommend monitoring rates and fr	Apply in sufficient water to obtain thore coverage of tops. Countdown L&G is recommended for use with disease monitoring systems which adjust funginates and frequency of application acc to disease hazard. Apply as follows:			
	Botrytis neck rot  Downy mildew (Peronospora destructor)				Low Disease Hazard & Prior to Infection	Low Disease Hazard & Some Disease Present	High Disease Hazard	
-				Rate per Acre	1½ pts	2 pts	41/4 pts	
-				Frequency	10 days	7-10 days	7 days	
				For suppres during stora applications pints of Cou recommend	ge, a minim prior to liftir intdown L&C	um of three ng, using 2	weekly to 41⁄4	
				The minimu days.	m re-treatme	ent interval	is 7	
				Apply by gro	ound, air or o	chemigation	1.	
	lestrictions: Do not ap ) during each growing s					r acre (10.5	fi.	
Onion (green bunching) Leek Shallots Onion and Garlic (grown for	Botrytis leaf blight (Botrytis spp.)  Purple blotch (Alternaria porri)  Suppression: Downy mildew	%-1½ oz.	21/4 to 41/4 pts.	Use in sufficient water to obtain thorough coverage of tops. Begin applications prior favorable infection periods, and repeat at to 10 day intervals for as long as condition favor disease (the minimum re-treatment interval is 7 days). Use the high rate and a day schedule of applications when heavy dew or rain persist.				
seed)	(Peronospora destructor)	·		Apply by gro		chemigation	). · 	

**Specific Use Restrictions:** Do not apply more than 13 pints Countdown L&G (6.75 lbs. a.i.) per acre (4.75 fl. oz./1,000 sq. ft.) during each growing season. Do not apply within 7 days of harvest on garlic. Do not apply within 14 days of harvest on green bunching onions, leeks or shallots.

CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
Papaya	Alternaria fruit spot (A. alternata)  Anthracnose (Colletotrichum spp.)  Stem end rot (A. alternata, Colletotrichum spp.)	%-1½ oz.	2¼ to 4¼ pts.	- Apply with ground equipment only, in sufficient water to obtain adequate coverage of fruit and leaves. Begin treatment when conditions favor development of disease and continue treatments at 14 day intervals until weather conditions no longer favor disease development (the minimum retreatment interval is 14 days).
				down L&G (6.75 lbs. a.i.) per acre (4.75 fl. // be applied the day of harvest.
Parsnip	Alternaria leaf spot	3/4-1 oz.	21/4 to 23/4	Apply in sufficient water to obtain adequate

Parsnip	Alternaria leaf spot (Alternaria spp.)	%-1 oz.	21/4 to 23/4 pts.	Apply in sufficient water to obtain adequate coverage. Make the first application at the first sign of disease or when conditions are
	Downy mildew (Plasmopara crustosa)			favorable for infection. Continue applications on a 7 to 10 day schedule (the minimum re-treatment interval is 7 days).
	Anthracnose ( <i>Colletotrichum</i> spp.)			Apply by ground, air or chemigation.
	Botrytis blight (gray mold) (B. cinerea)	·		
	Bottom rot (Rhizoctonia)			

**Specific Use Restrictions:** Do not apply more than 11.5 pints Countdown L&G (6 lbs. a.i.) per acre (4.25 fl. oz./1,000 sq. ft.) during each growing season. Do not apply within 10 days of harvest.

Passion Fruit (Hawaii only)	Alternaria fruit and leaf spot (Alternaria spp.)  Anthracnose (Colletotrichum	1 oz.	2% pts.	Apply with ground equipment in sufficient water to obtain adequate coverage of fruit and leaves. Begin applications during late bloom and repeat at 14 day intervals until weather conditions no longer favor disease development (the minimum re-treatment
	spp.)  Cercospora fruit spot			interval is 14 days).

**Specific Use Restrictions:** Do not apply more than 14.5 pints Countdown L&G (7.5 lbs. a.i.) per acre (5.5 fl. oz./1,000 sq. ft.) during each growing season. Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
Potato	Late blight (Phytophthora infestans)  Early blight (Alternaria solani)  Botrytis vine rot (B. cinerea)  Black dot (Colletotrichum coccodes)	½ oz. then ½-¾ oz.	1% pts then - 1% to 2% pts.	Begin applications at the low rate when vines are first exposed and leaf wetness occurs. Repeat applications at 5 to 10 day intervals (the minimum re-treatment interval is 5 days).  Begin applying the higher label rates at 5 to 10 day intervals when any one of the following events occur:  • Vines close within the rows • Late blight forecasting measures 18 disease severity values (DSV) • The crop reaches 300 P-days  Increase water spray volume as canopy density increases. Use the highest rate and shortest interval when plants are rapidly growing and disease conditions are severe.  Apply by ground, air, or chemigation. Do not exceed a 10 day interval between applications when using chemigation.

**Specific Use Restrictions:** Do not apply more than 21.5 pints of Countdown L&G (11.25 lbs. a.i.) per acre (8 fl. oz./1,000 sq. ft.) during each growing season. Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	FL. OZ./ 2.5 GALS./ 1,000 SQ. FT.	RATE PER ACRE	APPLICATION DIRECTIONS
Tomato	FOLIAGE  Early blight (Alternaria solani)  Late blight (Phytophthora infestans)  Gray leaf spot (Stemphyllium botryosum)  Gray leaf mold (Fluvia fluva; -Cladosporium)	¾-1 oz.	2 to 2¾ pts.	Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occur and disease threatens. Apply on a 7-10 day interval for foliage diseases. For fruit diseases, begin at fruit set and apply on a 7-14 day interval. Use the highest rate and shortest interval specified when disease conditions are severe. The minimum retreatment interval is 7 days.  Apply by ground, air, or chemigation.
	Septoria leaf spot (S. lycopersici)  Target spot (Corynespora cassiicola)			
	FRUIT  Anthracnose (Colletotrichum spp.)  Alternaria fruit rot (black mold) (A. alternata)  Botrytis gray mold (B. cinerea)  Late blight fruit rot	1-1½ oz.	2¾ to 4 pts.	
	(P. infestans)  Rhizoctonia fruit rot (R. solani)			

**Specific Use Restrictions:** Do not apply more than 29 pints Countdown L&G (15 lbs. a.i.) per acre (10.5 fl. oz./1,000 sq. ft.) during each growing season. Countdown L&G may be applied the day of harvest.

# **Tree and Orchard Crops**

Apply Countdown L&G in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre (7.5 gallons per 1,000 sq. ft.) unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre (2.5 gallons per 1,000 sq. ft.).

When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of Countdown L&G listed may be used.

Do not apply Countdown L&G through high pressure spray equipment. Do not use mistblowers, cold fog, or other fogging application equipment when making applications of Countdown L&G in greenhouses.

Do not apply Countdown L&G to blue spruce.

Do not allow livestock to graze in treated areas.

DISEASES	RATE FL. OZ./ 2.5 GALS.	RATE PER ACRE	PER 100 GALS.*	APPLICATION DIRECTIONS
Blossom blight/brown rot (Monilinia spp.) Shothole (Wilsonomyces carpophilus) Scab (Venturia carpophila)  e Restrictions: Do ft.) during each gro	not apply mo	re than 36 pi	2 pts.	Use water volumes of 20-300 gallons per acre. For blossom blight, begin application at popcorn (pink bud) and follow with an application at full bloom. If weather is still conducive for disease development, another application may be made at petal fall.  For control of shothole, make an application in the autumn at leaf fall. In the spring, make the first application at budbreak, followed by an application at shuck split to control nut infections and to control scab.  Apply by ground or air.  Vn L&G (18.75 lbs. a.i.) per acre (13 fl. olit). Do not apply within 150 days of
Eastern filbert blight ( <i>Anisogramma</i> <i>anomala</i> )	0.8 oz.	5¾ pts.	2 pts.	Use a water volume of 20 to 300 gallons per acre. Begin applications at the onset of disease or when weather conditions favor disease development. Make applications on a 14-28 day schedule, using the shorter interval under heavy disease pressure (the minimum retreatment interval is 14 days).
ig each growing sea	ison. Do not a	apply within 1	120 days of h	arvest. Do not apply through irrigation. Do
Leaf curl (Taphrina deformans)  Shot hole (Wilsonomyces carpophilus)	0.6-0.8 oz.	4½ to 5¾ pts.	1½ to 2 pts.	For best control of both diseases, apply at leaf fall in late autumn, using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels, use the high rate of application and apply once or twice more in mid to late winter before budswell. If the leaf fall application is not practical, application of Countdown L&G for control of leaf curl may be made at any time prior to budswell the following spring. Where shothole occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections.
	Blossom blight/brown rot (Monilinia spp.) Shothole (Wilsonomyces carpophilus) Scab (Venturia carpophila)  e Restrictions: Do ft.) during each grown (Anisogramma anomala)  e Restrictions: Do geach growing seath oils, other pesticioplication.  Leaf curl (Taphrina deformans) Shot hole (Wilsonomyces	Blossom blight/brown rot (Monilinia spp.)  Shothole (Wilsonomyces carpophilus)  Scab (Venturia carpophila)  e Restrictions: Do not apply monent blight (Anisogramma anomala)  e Restrictions: Do not apply monent (Anisogramma anomala)  e Restrictions: Do not apply monent anomala (Anisogramma anomala)  e Restrictions: Do not apply monent anomala (Anisogramma anomala)  control (Anisogramma anomala)  e Restrictions: Do not apply monent anomala (Anisogramma anomala)  se Restrictions: Do not apply monent anomala (Anisogramma anomala)  se Restrictions: Do not apply monent anomala (Anisogramma anomala)  se Restrictions: Do not apply monent anomala (Anisogramma anomala)  se Restrictions: Do not apply monent anomala (Anisogramma anomala)  se Restrictions: Do not apply monent anomala (Anisogramma anomala)  se Restrictions: Do not apply monent anomala (Anisogramma anomala)  se Restrictions: Do not apply monent anomala (Anisogramma anomala)  se Restrictions: Do not apply monent anomala (Anisogramma anomala)	Blossom blight/brown rot (Monilinia spp.)  Shothole (Wilsonomyces carpophilus)  Scab (Venturia carpophila)  Eastern filbert blight (Anisogramma anomala)  Each growing season. Do not apply more than 17 pting each growing season. Do not apply within the oils, other pesticides, surfactants or fertilized plication.  Leaf curl (Taphrina deformans)  Shot hole (Wilsonomyces)	Blossom blight/brown rot (Monilinia spp.)  Shothole (Wilsonomyces carpophila)  Restrictions: Do not apply more than 36 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 36 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)  Restrictions: Do not apply more than 17 pints Countdow (Anisogramma anomala)

CROP	DISEASES	RATE FL. OZ./ 2.5 GALS.	RATE PER ACRE	RATE PER 100 GALS.*	APPLICATION DIRECTIONS
	Lacy (russet) scab (plum/prune)  Brown rot blossom blight Monilinia spp.	0.6-0.8 oz.	4½ to 5% pts.	1½ to 2 pts.	Make one application at popcorn (pink, red or early white bud) and a second application at full bloom. If weather conditions favor disease development, make an additional application at petal fall
	Cherry leaf spot (Blumeriella jaapii)  Scab (Cladosporium carpophilum)  Black knot (cherry, plum) (Apiosporina morbosa)	0.6-0.8 oz.	4½ to 5¾ pts.	1½ to 2 pts.	In addition to the bloom application listed above, make one application at shuck split. Do not apply Countdown L&G after shuck split and before harvest. If additional disease control is needed before harvest, use another registered fungicide.  For control of cherry leaf spot after harvest, make one application to foliage within 7 days after fruit is removed. In orchards with a history of high leaf spot incidence, make a second application 10-14 days later.  Apply by ground or air.
Specific Us	e Restrictions: Do	not apply mo	re than 29.5	pints Countdo	own L&G (15.5 lbs. a.i.) per acre (10.75 fl.
oz./1,000 sq		owing seasor			own L&G (15.5 lbs. a.i.) per acre (10.75 fl. e applied the day of harvest. The minimum
oz./1,000 sq	i. ft.) during each gr	owing seasor			

<sup>\*</sup>Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

CROP	DISEASES (Pathogen)	RATE FL. OZ./ 2.5 GALS.	RATE PER ACRE	RATE PER 100 GALS.*	APPLICATION DIRECTIONS
Conifers (pines, spruces, Douglas fir)	Swiss needlecast (Phaeocryptopus gaeumannii)	1.6-3.2 oz.	4 to 8 pts.	4 to 8 pts.	Single application technique: In Christmas tree plantations or forest stands, make one application in the spring when new shoot growth is ½-2 inches in length.
~	Scleroderris canker (pines) (Gremmeniella abietina)  Swiss needlecast (Phaeocryptopus gaeumannii)	0.8-1.6 oz.	2½ to 4 pts:	21/4 to 4 pts.	Make the first application in spring when new shoot growth is ½-2 inches in length. Make additional applications at 3-4 week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week schedule.
	Sirococcus tip blight (S. conigenus)	1.2-2 oz.	2¾ to 5 pts.	2¾ to 5 pts.	-
	Rhizosphaera needlecast (spruces) (Rhizosphaera spp.)	3.2 oz.	8 pts.	8 pts.	
	Scirrhia brown spot (pines) (Mycosphaerella dearnessii)				
	Cyclaneusma and Lophodermium needlecasts (pines)	1.6-3.2 oz.	4-8 pts.	4-8 pts	Apply in early spring prior to budbreak. Repeat applications at approximately 6-8 week intervals, until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrence of needle wetness.
	Rhabdocline needlecast (Douglas-fir)	0.8-1.6 oz.	21/4-4 pts.	21/4-4 pts.	Apply at budbreak and repeat at 3-4 week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3 to 4 weeks as specified above. In nursery beds, use the high rate on a 3-week schedule.
	Botrytis seedling blight Phoma twig blight	0.8-1.6 oz.	21/4-4 pts.	21/4-4 pts.	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7-14 day intervals as long as disease favorable conditions persist.

CROP	DISEASES (Pathogen)	RATE FL. OZ./ 2.5 GALS.	RATE PER ACRE	RATE PER 100 GALS.*	APPLICATION DIRECTIONS
	Autoecious needle rust (Weir's cushion) (spruce)	3.2 oz.	8	8	Begin applications when 10% of buds have broken and twice thereafter at 7-10 day intervals.

Do not apply more than 31.5 pints Countdown L&G (16.5 lbs. a.i.) per acre (11.5 fl. oz./1,000 sq. ft.) during each growing season. The minimum re-treatment interval for established trees is 21 days. The minimum re-treatment interval in nursery beds is 7 days.

<sup>\*</sup>Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

#### Turf

Do not use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, playfields, recreational park athletic fields, athletic fields located on or next to schools (ie., elementary, middle and high schools), campgrounds, churches and theme parks.

Do not use Countdown L&G on fine fescue turf due to the potential for phytotoxicity or turfgrass injury.

DO NOT mow or water after treatment until spray deposited on turfgrass is thoroughly dry; Countdown L&G should always be used in conjunction with good turf management practices.

Sodfarm turf treated with chlorothalonil prior to harvest must be mechanically cut, rolled and palletized.

**Group A**. Golf Course Fairways, Lawns (around commercial and industrial buildings), & Other Turfgrasses (professional and collegiate athletic fields) and Ornamental Turfgrass:

Do not apply more than 50 pints/acre (18.4 fl. oz./1,000 sq. ft.) of Countdown L&G (26 lbs. a.i./acre) per growing season. The minimum re-treatment interval for single application rates up to 14 pints/acre (5 fl. oz./1,000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) is 7 days. Do not apply more than one application of a rate greater than 14 pints/acre (5 fl. oz./1,000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) per growing season. The maximum single application rate is 22 pints/acre (8 fl. oz./1,000 sq. ft.) of Countdown L&G (11.3 lbs. a.i./acre).

#### **Sod Farms:**

Do not use for sod farms at application rates greater than 13 pounds of active ingredient, per acre, per year. Do not apply more than 25 pints/acre (9.2 fl. ozs./1000 sq. ft.) of Countdown L&G per growing season (13 lbs. a.i./acre) per growing season. The minimum re-treatment interval for single application rates up to 14 pints/acre (5 fl. ozs./1000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) is 7 days. Do not apply more than one application of a rate greater than 14 pints/acre (5 fl. ozs./1000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) per growing season. The maximum single application rate is 22 pints/acre (8 fl. ozs./1000 sq. ft.) of Countdown L&G (11.3 lbs. a.i./acre).

Apply Countdown L&G in 30-40 gals. of water per acre. Begin applications when conditions favor disease development and repeat applications as long as these conditions persist. Under severe disease conditions, use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

## **GROUP B. Golf Course Tees and Greens:**

Golf Course Tees: Do not apply more than 100 pints/acre (37 fl. oz./1,000 sq. ft.) of Countdown L&G (52 lbs. a.i./acre) per growing season. The minimum re-treatment interval for single application rates up to 14 pints/acre (5 fl. oz./1,000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) is 7 days and the minimum re-treatment interval after an application of a rate greater than 14 pints/acre (5 fl. oz./1,000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) is 14 days. Do not apply more than two applications of a rate greater than 14 pints/acre (5 fl. oz./1,000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) per growing season. The maximum single application rate is 22 pints/acre (8 fl. oz./1,000 sq. ft.) of Countdown L&G (11.3 lbs. a.i./acre).

Golf Course Greens: Do not apply more than 140 pints/acre (52 fl. oz./1,000 sq. ft.) of Countdown L&G (73 lbs. a.i./acre) per growing season. The minimum re-treatment interval for single application rates up to 14 pints/acre (5 fl. oz./1,000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) is 7 days and the minimum re-treatment interval after an application of a rate greater than 14 pints/acre (5 fl. oz./1,000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) is 14 days. Do not apply more than two applications of a rate greater than 14 pints/acre (5 fl. oz./1,000 sq. ft.) of Countdown L&G (7.3 lbs. a.i./acre) per growing season. The maximum single application rate is 22 pints/acre (8 fl. oz./1,000 sq. ft.) of Countdown L&G (11.3 lbs. a.i./acre).

Apply Countdown L&G in an adequate amount of water to provide complete coverage. This amount may vary from 2 to 10 gallons per 1,000 square feet or 90 to 450 gallons per acre. See below for suggested rates and timing. Under severe disease conditions, use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

		Pi	e-Disease R	ates <sup>a</sup>	Post-Disease Rates <sup>a</sup>			
Diseases Controlled *	Application Interval (days)	fl. oz. product/ 1,000 sq ft	pints product/ acre	lbs a.i./	fl. oz. product/ 1,000 sq ft	pints product/ acre	lbs a.i./ acre	
Dollar Spot	7 to 10	1.5 <sup>b</sup> to 3	4 <sup>b</sup> to 8	2.1 <sup>b</sup> to 4.16	-		-	
	7 to 21	3 to 5	8 to 14	4.16 to 7.3		-	-	
•	14	-	-		6 to 8	16 to 22	8.32 to 11.3	
Leaf Spot	7 to 10	3	8 .	4.16	-	•	-	
Melting-Out	7 to 21	3 to 5	8 to 14	4.16 to 7.3		-	-	
Brown Blight	14	-		· - ]	6 to 8	16 to 22	8.32 to 11.3	
Brown Patch	7 to 14	3 to 5	8 to 14	4.16 to 7.3	-	•	-	
	- 14		-	-	6 to 8	16 to 22	8.32 to 11.3	
Gray Leaf Spot	7 to 10	3 to 5	8 to 14	4.16 to 7.3	-	-		
	14	-	-	-	6 to 8	16 to 22	8.32 to 11.3	
Red Thread	7 to 10	3 to 5	8 to 14	4.16 to 7.3	-	•		
	14	5.3 to 8	14.3 to 22	7.4 to 11.3	8	22	11.3	
Anthracnose	7 to 14	4.4 to 5	12 to 14	6.2 to 7.3	-	-	-	
	14	5.3 to 8	14.3 to 22	7.4 to 11.3	-	-	-	
Copper Spot	14	6 to 8	16 to 22	8.32 to 11.3	8	22	11.3	
Stem Rust (Bluegrass)	14	6 to 8	16 to 22	8.32 to 11.3	8	22	11.3	
DICHONDRA: Leaf Spot (CA only)	14	6 to 8	16 to 22	8.32 to 11.3	8	22	11.3	
Gray Snow Mold <sup>c</sup>	30	8	22	11.3	· -	-	-	
Fusarium (Gerlachia) Patch <sup>c</sup>	21 to 28	8	22	11.3	-	-	. <b>-</b>	
Algae <sup>c</sup>	7 to 14	3 to 5	8 to 14	4.16 to 7.3	3 to 5	8 to 14	4.16 to 7.3	
ľ	14	-	-	-	6 to 8	16 to 22	8.32 to 11.3	

<sup>&</sup>lt;sup>a</sup>Group A Turf: Limit of one application per season at rates greater than 7.3 lbs. ai/acre (14 pints/acre or 5 fl. oz./1,000 sq. ft. of Countdown L&G).

**Group B Turf:** Limit of two applications per season at rates greater than 7.3 lbs. ai/acre (14 pints/acre or 5 fl. oz./1,000 sq. ft. of Countdown L&G).

<sup>&</sup>lt;sup>b</sup>Low rate is not effective on intensively mowed turfgrasses such as golf course tees and greens.

c See specific use directions below.

Dashes (-) in the above table: Not recommended.