7969-197 7-23-2003 1/37

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:	Date of Issuance:
7969-197	JUL 23 2003

Term of Issuance: Unconditional

Name of Pesticide Product:
Endura Fungicide

NOTICE OF PESTICIDE:

x Registration

__ Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

BASF Corporation
P.O. Box 13528
Research Triangle Park, NC 27709

Attention: Khalid Akkari, Ph.D.

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5) provided that you comply with the following terms and conditions of the registration:

1. Add the phrase "EPA Registration No. 7969-197 to your label before you release the product for shipment.

2. Submit the following studies conducted in accordance with the Good Laboratory Practice Standards, 40 CFR part 160; the Data Requirements for Registration Regulations, 40 CFR Part 158; and appropriate test guidelines as referenced in 40 CFR Part 158.

SEE THE ATTACHMENT "CONDITIONS OF REGISTRATION"

Signature of Approving Official:	Date:
Cynthia Giles-Parker (5) Product Manager, (22) Fungicide Branch Registration Division	JUL 23 2003

EPA Form 8570-6

EPA Registration No. 7969-197
Endura Fungicide

Submit production information (pounds or gallons produced) for this product for the fiscal year in which the uses are conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1 and ends September 30. Production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year. This information must be submitted to:

U.S. Environmental Protection Agency
Office of Pesticide Programs
Registration Support Branch
Registration Division (7505C)
Washington, D.C. 20460

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

enclosures
Conditions of Registration
Label accepted w/comments

JUL 23 2003

EPA Registration No. 7969-197
Endura Fungicide

CONDITIONS OF REGISTRATION

1. Submission of a radiovalidation study to support the adequacy of the proposed tolerance enforcement method (DFG S19) for livestock matrices. These radiovalidation data will also be used in support of the data collection method (471/0) for livestock matrices. Submission due date - December 31, 2003.

2. Submission of radiovalidation data demonstrating the efficiency of the microwave hydrolysis step in Method 476/0, which determines bound residues of BAS 510 F in milk and liver. Submission due date - December 31, 2003.

3. Submission of all the proposed data collection and tolerance methods, revised to state that solutions of analytical standards should not be stored longer than 2 months before replacement. Submission due date is August 30, 2004. The proposed enforcement methods should also be revised in accordance with any comments made by ACB/BEAD arising from the TMV trials. All revisions to the method are due within 4 months once the company has been notified of all changes that are needed.

4. Submission of the Final Report of the storage stability study in plant matrices. The report should include a description of the fortification solutions (solvent) used in the study and a full description of the analytical method (445/0). Submission due date - August 30, 2004

5. Submission of data demonstrating the frozen storage stability of BAS 510 F residues in processed grape juice (2 months) and tomato paste (5 months). Submission due date - December 31, 2003.

6. Submission of the following additional field trials, conducted per their respective proposed use pattern: Submission due date August 31, 2004.

   - 3 for mustard greens (one each from Regions 2, 3, and 10)
   - 2 for cucumber (one each from Regions 2 and 10)
   - 1 for sunflower seed (from Region 5)

7. Submission of a limited field accumulation study (two sites) which provides residue data on beet tops (sugar or garden) and turnip tops, from beets and turnips planted as rotational crops into treated soil 14 days following the last of 3 applications of BAS 510 F totaling ~1.8 lbs ai/A. Provided those data show the rotational crop tolerance of 1.0 ppm for the leaves of root and tuber vegetables (crop group 2) is not exceeded, further studies would not be required. Submission due date - August 31, 2004.

8. Submission of a limited field accumulation study (two sites) which provides residue data on spinach and celery, planted as rotational crops into treated soil 14 days following the last of 3 applications of BAS 510 F F F totaling ~1.8 lbs ai/A. Provided those data show the 1.0 ppm rotational tolerance on crop group 4 (except lettuce) is not exceeded, further studies would not be required. Alternatively, the petitioner may submit a full set of crop field trials data for spinach (6) and celery (6), via a use pattern similar/identical to that for lettuce, and request a direct use tolerance on all of crop group 4. Submission due date - August 31, 2004.

9. Revised Section F. Submission due date - August 30, 2003

10. Aquatic toxicity tests using fish and invertebrates were classified as supplemental since water quality parameters did not adhere to standards recommended by the Agency. If the registrant can demonstrate that pH, water hardness and the use of dechlorinated tap water do not affect the toxicity of boscalid and if it can be demonstrated that mean measured concentrations accurately reflect the amount of chemical in solution, these studies can be upgraded to core. Submission due date - August 31, 2004.

11. Submission of a freshwater invertebrate life cycle study - none of the required data are provided on growth (length and weight) of Daphnia magnia. If these data are not available, the study must be repeated. Submission due date - August 31, 2004.

12. Submission of the toxicity data must be provided for freshwater mollusc such as *Corbicula spp.*, given the persistence of boscalid and its tendency to partition on to sediments. Submission due date - August 31, 2004.

13. A 21/28 day inhalation study. Submission due date - August 31, 2004.

14. For Endura, the acute oral, acute dermal, acute inhalation and primary skin irritation studies are classified as supplementary. The above studies are potentially upgradable depending on an adequate explanation of the deviations. Submission due date - February 27, 2004

15. For Endura, the dermal sensitization study is classified as unacceptable because the highest minimally irritating concentration of test substance was not established. A new study must be submitted to satisfy the requirements for registration. Submission due date - August 31, 2004.

16. Provide the five batch analysis for the final production run for the active ingredient.provide the dermal sensitization study is classificed as unacceptable. A new study must be submitted. Submission due date - August 31, 2004.

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BASF

GROUP 7 FUNGICIDE

ACCEPTED
with COMMENTS
In EPA Letter Dated
JUL 23 2003
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 7969-197

Endura®
fungicide

For use in berries, dry and succulent beans, bulb vegetables, canola, carrots, fruiting vegetables, grapes, lettuce, peanuts, pistachio, potatoes, stone fruits, strawberries and tree nuts

Active ingredient	
Boscalid, 3-pyridinecarboxamide,2-chloro-N-(4'-chloro(1,1'-biphenyl)-2-yl)	70.0%
Inert ingredients	30.0%
Total	100.0%

[0.7 oz. a.i. (0.044 lb a.i.) in 1 oz. of **Endura®** Fungicide]

EPA Reg. No. 7969-ROT **EPA Est. No.**

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 detalle.
(If you do not understand this label, find someone to explain it to you in detail.)

See the attached booklet for complete **First Aid, Precautionary Statements, Directions For Use,** and **Conditions of Sale and Warranty.**

Net contents:

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

FIRST AID	
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• 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.
If swallowed	• Call a 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 a 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. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).	

Precautionary Statements

Hazards to Humans and Domestic Animals

Warning. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Harmful if swallowed. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Avoid contact with skin, eyes or clothing. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks

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

Engineering Controls Statement

When handlers use closed systems, enclosed cabs, 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 clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

Do not apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

Surface Water Advisory

This product may contaminate water through drift of spray in wind. This product has a potential for runoff according to the pesticides's "mean" soil partition coefficient (15 mL/g2) for several months or more after application. Poorly draining soils and soils with shallow watertables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

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.

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
- Waterproof gloves
- Shoes plus socks

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Storage and Disposal

Storage:

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

• **Pesticide disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility If these wastes cannot be disposed of 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:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

In Case of Spill

In case of large-scale spillage regarding this product, call:

CHEMTREC	800-424-9300
BASF Corporation	800-832-HELP

Steps to be taken in case material is released or spilled:

Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.

Remove contaminated clothing and wash affected skin areas with water.

Wash clothing before re-use.

Keep spill out of all sewers and open bodies of water.

I. General Information

This package contains **Endura® fungicide**, a water dispersable granule (WG). Boscalid, active ingredient in **Endura** belongs to the group of respiration inhibitors classified by the U.S. EPA and Canada PMRA as carboxamides, or Target Site of Action Group 7 fungicides. **Endura** has a new mode of action and is effective against pathogens resistant to other fungicides.

Endura has a protective effect because it inhibits spore germination and a curative-eradicative effect because it inhibits mycelial growth and sporulation of the fungus on the leaf surface. **Endura** can therefore be applied in either pre- or postinfection situations. However, optimum disease control is achieved when **Endura** is applied in a regularly scheduled protective spray program and is used in a rotation program with other fungicides.

Because of its high specific activity and rainfastness, **Endura** has good residual activity against target fungi.

Resistance Management

Endura contains boscalid, a Group 7 fungicide, and is effective against pathogens resistant to fungicides with modes of action different from those of carboxamide (anilide) fungicides (Target site Group 7), such as for example, dicarboximides, sterol inhibitors, benzimidazoles, Qol fungicides, and phenylamides. Fungal isolates resistant to Group 7 fungicides may eventually dominate the fungal population if Group 7 fungicides are used predominantly and repeatedly in the same field in successive years as the primary method of control for the targeted pathogen species. This may result in reduction of disease control of **Endura** or other Group 7 fungicides.

To maintain the performance of **Endura** in the field, do not exceed the total number of sequential applications of **Endura** and the total number of applications of **Endura** per season stated in Sections V. and VI. Adhere to the label instructions regarding the consecutive use of **Endura** or other target site of action Group 7 fungicides that have a similar site of action on the same pathogens.

The following recommendations may be considered to delay the development of fungicide resistance:

1. **Tank mixtures**: Use tank mixtures with fungicides from different target site of action groups that are registered/permitted for the same use and that are effective against the pathogens of concern. BASF recommends using at least the minimum labeled rates of each fungicide in the tank mix.
2. **IPM**: **Endura** should be integrated into an overall disease and pest management program. Cultural practices known to reduce disease development should be followed. Consult your local extension specialist, certified crop advisor and/or BASF representative for additional IPM strategies established for you area. **Endura** may be used in Agricultural Extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.
3. **Monitoring**: Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development.
4. **Reporting**: If a group 7 target site fungicide, such as **Endura**, appears to be less or not longer effective against a pathogen that it previously controlled or suppressed, contact a BASF representative, local extension specialist, or certified crop advisor to assist in determining the cause of reduced performance.

Cleaning Spray Equipment

Spraying equipment must be cleaned thoroughly before and after applying this product, particularly if a product with the potential to injure crops was used prior to **Endura.**

II. Application Instructions

Apply recommended rates of **Endura** as instructed by the **Crop-Specific Recommendations**. Apply **Endura** with ground sprayer, aerial equipment or through sprinkler irrigation equipment. Equipment should be checked frequently for calibration. Under low-level disease conditions, the minimum application rates can be used while maximum application rates and shortened spray schedules are recommended for severe or threatening disease conditions. Do not apply when conditions favor drift from target area.

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Ground Application: Apply **Endura® fungicide** in sufficient water to ensure thorough coverage of foliage, bloom, and fruit. Thorough coverage is required for optimum disease control.

Aerial Application: BASF recommends ground applications for thorough coverage. For those crops or in conditions where applications cannot be done by ground equipment, aerial application can be made. Avoid applications under conditions when uniform coverage cannot be obtained or when spray drift may occur. Use no less than 5 gallons of spray solution per acre. For aerial applications to tree and vine crops, use no less than 10 gallons of spray solution per acre. For all other crops, thorough coverage is required for optimum disease control.

Directions for Use Through Sprinkler Irrigation Systems

Sprayer Preparation: Chemical tank and injector system should be thoroughly cleaned. Flush system with clean water.

Application Instructions: Apply **Endura** at rates and timings as described in this label.

Use Precautions for Sprinkler Irrigation Applications:

- Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system.
- Add this product to the pesticide supply tank containing sufficient water to maintain a continuous flow by the injection equipment. In continuous moving systems, inject this product-water mixture continuously, applying the labeled rate per acre for that crop. Do not exceed 1/2 inch (13,577 gallons) per acre. In stationary or non-continuous moving systems, inject the product-water mixture in the last 15-30 minutes of each set allowing sufficient time for all of the required pesticide to be applied by all the sprinkler heads and applying the labeled rate per acre for that crop. Do not apply when wind speed favors drift beyond the area intended for treatment. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Thorough coverage of foliage is required for good control. Good agitation should be maintained during the entire application period.
- If you have questions about calibration you should contact State Extension Service specialist, equipment manufacturers or other experts.
- 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.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. 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.
- 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.

Specific Instructions for Public Water Systems:

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, 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.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide

injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

III. Additives and General Tank Mixing Information

Endura® fungicide can be tank mixed with most recommended fungicides and insecticides herbicides. liquid fertilizers, biological control products, adjuvants, and additives as specified in **Section VI. Crop-Specific Recommendations**.

Under some conditions, the use of additives or adjuvants may improve the performance of **Endura**.

However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also influence crop tolerance and may not match those under which BASF has conducted testing. Physical incompatibility, reduced disease control, or crop injury may result from mixing **Endura** with other products. Therefore, before using tank mix (fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives), test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

Consult a BASF representative or local agricultural authorities for more information concerning additives.

IV. Compatibility Test and Mixing Order

If tank mixtures are used, adhere to restrictions due to rates, label recommendations and precautions on all labels.

Compatibility Test for Tank Mix Components

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

1) **Water:** — For 100 gallons per acre spray volume, use 16 cups (1 gallon) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
2) **Water-dispersible products**: — (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions) Cap the jar and invert 10 cycles.
3) **Water-soluble products**: — Cap the jar and invert 10 cycles.
4) **Emulsifiable concentrates**: — (oil concentrate or methylated seed oil when applicable) Cap the jar and invert 10 cycles.
5) **Water-soluble additives**: — Cap the jar and invert 10 cycles.
6) Let the solution stand for 15 minutes.
7) **Evaluate** the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

Mixing Order

1) **Water:** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
2) **Agitation.** Maintain contant agitation throughout mixing and application.
3) **Inductor.** if an inductor is uesd, rinse it thoroughly after each component has been added.
4) **Products in PVA bags:** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
5) **Water-dispersible products:** (such as **Endura**, fungicide, dry flowables,wettable powders, suspension concentrates, or suspo-emulsions).
6) **Water-soluble products.**
7) **Emulsifiable concentrates:** (such as oil concentrates when applicable).
8) **Water-soluble additives:** (such as AMS or UAN when applicable).
9) **Remaining quantity water** Make sure that each component is thoroughly mixed and suspended before adding tank mix partners. Make constant agitation during application. See Section **VI. Crop-Specific Restrictions and Limitations** for more details.

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V. General Restrictions and Limitations - All Crops

- **Maximum seasonal use rate:** Do not apply more than the maximum rate per acre as listed in **Table 1. Crop-Specific Restrictions and Limitations** and **Table 2. Crop-Specific Recommendations.**
- **Maximum rate per application:** Do not apply more than the maximum rate per acre per application as listed in **Table 1. Restrictions and Limitations** and **Table 2. Crop-Specific Recommendations.**
- Do not make more than the total number of applications of **Endura® fungicide** per season, as listed in **Table 1. Crop-Specific Restrictions and Limitations** and **Table 2. Crop-Specific Recommendations.**
- **Preharvest Interval (PHI):** See **Table 1. Crop-Specific Restrictions and Limitations** and **Table 2. Crop-Specific Recommendations.**
- **Livestock Feeding Restrictions:** Do not feed peanut hay to livestock.
- Do not apply more than the maximum season use rate of a.i./A for each specific crop from any combination of products (e.g. **Pristine®**, **Endura®**, **Emerald®**.
- **Plantback Restrictions:** Crops with registered uses may be replanted at any time. All other crops grown for food or feed may be planted after 14 days.
- Do not use on soybean, cowpeas, field pea and lupin.
- Do not use on garden beet, radish and turnip.

Table 1. Crop-Specific Restrictions and Limitations

Crop	Minimum Time from Application to Harvest (PHI) (days)	Maximum Rate per Acre per Application (oz. product)	Maximum Number of Applications per Season[2]	Maximum Rate per Acre per Season (oz. product)	Livestock Grazing or Feeding
Beans, dry	21	11	2	22	NA[3]
Beans, succulent	7	11	2	22	NA
Berries Group[1]: Blueberry, Caneberry, Raspberry	0	8	4	32	NA
Bulb Vegetables Group[1]: Onion, Garlic, Leeks	7	6.8	6	41	NA
Canola	21	6	2	12	Yes
Carrots	0	4.5	5	22.5	Yes, for carrot culls
Fruiting Vegetables Group:[1] Tomato Bell Pepper Chili Pepper Eggplant	0	12.5	2	25	NA
Grapes	14	8	3	25	NA
Lettuce	14	11	2	22	NA
Peanut	14	10	3	30	Restricted
Pistachio	14	5.3	4	21.2	NA
Potato	30	10	2	20.5	Yes
Stone Fruits Group[1]: Apricot, Cherry, (sweet and sour) Nectarine, Peach, Plum, Prune	0	5.3	5	26.5	NA
Strawberries	0	8	5	40	NA
Tree Nuts Group[1] Pecan, Walnut, etc., except Almond	14	5.3	4	21.2	NA
Almond	For Almond 5 weeks after petal fall	5.3	4	21.2	Yes for Almond hulls

[1] For a complete list of crops within a crop group, see Section **VI. Crop-Specific Recommendations.**
[2] At the maximum use rate only
[3] NA = not applicable Aerial Application is permitted for all labeled crop uses.

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VI. Crop-Specific Recommendations

Table 2. Crop Specific Recommmendations

Crop	Target Diseases	Use Rate per application	Maximum Number of applications per season	Maximum Rate per season	Minimum Time from application to harvest (PHI)
Beans, dried and succulent Broad bean Guar Lablab bean *Lupinus* spp. Grain lupin Sweet lupin White lupin White sweet Lupin *Phaseolus* spp. Field bean Kidney bean Pink bean Lima bean Navy bean Pinto bean Runner bean Snap bean Tepary bean Wax bean *Vigna* spp. Adzuki bean Asparagus bean Blackeyed pea Catjang (Chinese) long bean Crowder pea Jack bean Yard long bean Moth bean Mung bean Rice bean Southern pea Urd bean	Ascochyta blight *(Phoma exigua, Ascochyta spp.)* Botrytis gray mold *(Botrytis cinerea)* Rust *(Uromyces appendiculatus)* White mold *(Sclerotinia sclerotiorum)*	8 to 11 oz. per acre	2	22 oz. per acre	Dried Beans 21 days Succulent Beans 7 days
Chickpea (garbanzo bean) Lentils	Ascochyta blight *(Phoma exigua, Ascochyta spp.)* Botrytis gray mold *(Botrytis cinerea)* Rust *(Uromyces appendiculatus)* White mold *(Sclerotinia sclerotiorum)*	6 oz. per acre			

See next page for instructions.

Application Directions: Apply **Endura® fungicide** at the beginning of flowering or prior to onset of disease.

Use the higher rate for extended protection and maximum yield benefit. Apply a second time at full bloom if conditions are favorable for disease development or if heavy disease has already set in. Later applications work best to control powdery mildew as it often invades late in the flowering period.

Ascochyta blight in chickpeas and lentils develops quickly once established so early detection and application is essential to reduce losses.
Apply at the beginning of flowering. Make a second application 7 to 10 days later if disease persists or weather conditions are favorable for disease development.

Resistance management: To limit the potential for development of resistance, do not make more than two (2) applications of **Endura** per season.

Table 2. Crop-Specific Recommendations (CONT):					
Crop	**Target Diseases**	**Use Rate per Application**	**Maximum Number of Applications per Season**	**Maximum Rate per Season**	**Minimum Time from Application to Harvest (PHI)**
Berry Group Blackberry (all varieties) Blueberry Currant Elderberry Gooseberry Huckleberry Loganberry Raspberry (black and red)	Botrytis gray mold *(Botrytis cinerea)*	8 oz. per acre	4	32 oz. per acre	0 days
	Application Directions: Begin applications of **Endura® fungicide** prior to disease development and continue on a 7 to 14 day interval. Do not apply by air. Use the shorter interval when disease pressure is high. **Resistance Management**: To limit the potential for development of resistance, do not make more than four (4) applications of **Endura** per season. Do not make more than two (2) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Bulb Vegetables Group Onions (all varieties) Garlic Leek Shallot	Purple blotch *(Alternaria porri)* Botrytis leaf blight *(Botrytis* spp.*)*	6.8 oz. per acre	6	41 oz. per acre	7 days
	Application Directions: For control of purple blotch and botrytis leaf blight begin applications of **Endura® fungicide** prior to disease development and continue on a 7 to 14-day interval. Use the higher rate and shorter interval when disease pressure is high. **Resistance Management**: To limit the potential for development of resistance, do not make more than six (6) applications of **Endura** per season. Do not make more than two (2) application of **Endura** before alternating to a labeled fungicide with a different mode of action.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Canola	Sclerotinia stem rot *(Sclerotinia sclerotiorum)*	5 to 6 oz. per acre	2	12 oz. per acre	21 days
	Application Directions: Begin applications of **Endura® fungicide** at 20 to 50% flowering or prior to the onset of disease. Use the higher rate for extended protection. Apply a second time if conditions continue to be favorable for disease development. **Resistant management:** To limit the potential for development of resistance, do not make more than two (2) applications of **Endura** per season.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Carrots	Alternaria leaf spot *(Alternaria* spp.*)*	4.5 oz. per acre	5	22.5 oz. per acre	0 days
	Application Directions: Begin applications of **Endura® fungicide** prior to disease development and continue on a 7 to 14 day interval. Use the shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than five (5) applications of **Endura** per season. Do not make more than two (2) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Fruiting Vegetable Group Eggplant Ground cherry Pepino Pepper (all varieties) Tomatillo Tomato	Early blight *(Alternaria solani)*	2.5 to 3.5 oz. per acre or 2.5 to 3.5 oz. per 100 gallons of spray volume (dilute)*	6	21 oz. per acre	0 days
Tomato	Botrytis gray mold (*Botrytis cinerea*)	9 to 12.5 oz. per acre	2	25 oz per acre	

Application Directions: Begin applications of **Endura® fungicide** prior to disease development and continue on a 7 to 14 day interval for, early blight and Botrytis Gray mold Use the higher rate and the shorter interval when disease pressure is high.

*For applications based on dilute volume, plants should be sprayed to runoff. Apply a minimum of 20 gallons of spray volume per acre, and increase the spray volume as the plants grow during the season. Spray volume should be proportional to the amount of plant tissue to be covered such that 100 gallons of spray per acre is used on mature plants.

Resistance Management: To limit the potential for development of resistance, do not make more than six (6) applications of **Endura** per season. Do not make more than two (2) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Appolication	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI))
Grapes Muscadines	Powdery mildew *(Uncinula necator)*	4.5 oz per acre	5	25 oz. per acre	14 days
	Botrytis gray mold *(Botrytis cinerea)*	8 oz per acre	3		
	Application Directions: For powdery mildew control, begin applications of **Endura® fungicide** at budbreak or prior to the onset of disease and continue on a 10 to 14 day interval. For the control of Botrytis gray mold begin applications of **Endura** prior to disease development and when conditions favor disease development during early bloom, bunch pre-closure or veraison. Use the higher rate and the shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than five (5) applications of **Endura** per season. Do not make more than three (3) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Appolication	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI))
Lettuce, head and leaf	Lettuce drop (*Sclerotinia minor, S. Sclerotiorum*) Botrytis rot (*Botrytis cinerea*) <u>Suppression Only</u> Rhizoctonia bottom rot *(Rhizoctonia solani)*	8 to 11 oz. per acre	2	22 oz. per acre	14 days
	Application Directions: On direct-seeded lettuce, make the first application immediately after emergence or prior to disease development. On transplanted lettuce, make the first application immediately after transplanting or prior to the onset of disease. If conditions continue to favor disease development, or if soil surface is disturbed by cultivation, make a second application. Use the higher rate when disease pressure is high. **Resistance management:** To limit the potential for development of resistance, do not make more than two (2) applications of **Endura** per season.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Mimimum Time from Application to Harvest (PHI)
Peanut	Early leaf spot (*Cercospora arachidicola*) Late leaf spot (*Cercosporidium personatum*)	6.5 to 10 oz. per acre	3	30 oz. per acre	14 days
	Sclerotinia blight (*Sclerotinia minor*) Web blotch (*Phoma arachidicola*) **Suppression Only** Sclerotium stem rot - Southern stem rot (*Sclerotium rolfsii*)	8 to 10 oz. per acre			
	Application Directions: For control of early and late leaf spot, and web blotch, begin applications of **Endura® fungicide** prior to the onset of disease and continue on a 14 day interval. For control of Sclerotinia blight, begin applications of **Endura** prior to the onset of disease or at 45 to 60 days after planting. Make a second application 14 to 21 days later. For suppression of Southern stem rot (*Sclerotium rolfsii*), apply **Endura** prior to disease development or at 45 to 60 days after planting. Two additional applications may be made at 14 day intervals. For improved control of Southern stem rot, **Endura** may be mixed with other labeled, effective fungicides. Use the higher rate and/or shorter spray interval when disease pressure is high or in fields with a history of disease. Do not feed peanut hay to livestock. **Resistance Management:** To limit the potential for development or resistance, do not make more than three (3) applications of **Endura** per season. Do not make more than two (2) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Pistachio	Alternaria late blight *(Alternaria alternata)*	5.3 oz. per acre	4	21.2 oz. per acre	14 days
	Application Directions: Apply **Endura® fungicide** prior to the onset of disease development and continue on a 7 to 28 day interval. Use the shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than four (4) applications of **Endura** per season. Do not make more than three (3) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action. For aerial application to pistachio trees, use no less than 10 gallons of spray solution per acre.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Potato	Early blight (*Alternaria* spp.)	2.5 to 4.5 oz. per acre	4	20.5 oz. per acre	30 days
	White mold *(Sclerotinia sclerotiorum)*	5.5 to 10 oz. per acre	2		

Application Directions: For control of Sclerotina white mold, begin applications of **Endura® fungicide** prior to row closure or at the onset of disease. Make a second application 14 days later if conditions continue to be favorable for disease development.
For control of Alternaria early blight, begin applications of **Endura** prior to the onset of disease and continue applications at 7 to 14 day intervals if conditions continue to be favorable for disease development.

Use the higher rates once disease has been confirmed in your area or weather conditions are conducive to disease development.

Resistance Management: To limit the potential for development of resistance, do not make more than four (4) applications of **Endura** per season.

Do not make more than two (2) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Stone Fruits Group Apricot Cherry (sweet and tart) Nectarine Peach Plum (all varieties) Plumcot Prune	Brown rot (*Monilinia* spp.) Monilinia blossom blight (*Monilinia* spp.) Powdery mildew (*Sphaerotheca* spp., *Podosphaera* spp.)	5.3 oz. per acre	5	26.5 oz. per acre	0 days

Application Directions: Begin applications of **Endura® fungicide** at pink bud or prior to the onset of disease and continue on a 7 to 14 day interval.

Use the shorter interval when disease pressure is high.

Resistance Management: To limit the potential for development of resistance, do not make more than five (5) applications of **Endura** per season.

Do not make more than two (2) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.

For aerial application to stone fruits trees, use no less than 10 gallons of spray solution per acre.

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Strawberries	Botrytis gray mold *(Botrytis cinerea)*	8 oz. per acre	5	40 oz. per acre	0 days
	Application Directions: Begin applications of **Endura® fungicide** no later than 10% bloom or prior to the onset of disease and continue on a 7 to 14 day interval. Use the shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than five (5) applications of **Endura** per season. Do not make more than three (3) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.				

Table 2. Crop-Specific Recommendations (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Tree Nuts Group Almond Beech nut Brazil nut Butternut Cashew Chestnut Chinquapin Filbert Hickory nut Macadamia nut Pecan Walnut (black and English)	Alternaria leaf spot *(Alternaria* spp.*)* Blossom blight *(Monilinia* spp.*)* Green fruit rot *(Botrytis cinerea)* <u>Suppression Only</u> Scab *(Cladosporium carpophilum, C. caryigenum)*	5.3 oz. per acre	4	21.2 oz. per acre	14 days (for almond - apply no later than 5 weeks after petal fall)

Application Directions: In almond, begin applications of **Endura® fungicide** at pink bud and continue on a 7 to 14 day interval up to 5 weeks after petal fall. In pecan, begin application of **Endura** prior to disease development and continue on a 7 to 21 day interval for the suppression of scab. For all other crops listed above, apply **Endura** prior to the onset of disease and continue on a 7 to 28 day interval.

In all cases, use the shorter interval when disease pressure is high or shoot growth is very rapid.

Resistance Management: To limit the potential for development of resistance, do not make more than four (4) applications of **Endura** per season.

Do not make more than two (2) sequential applications of **Endura** before alternating to a labeled fungicide with a different mode of action.

For aerial application to tree nuts, use no less than 10 gallons of spray solution per acre.

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASF OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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Supersedes: NVA 2002-04-201-0156

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

BASF

Endura®

fungicide

Supplemental Labeling

For use in cucurbit vegetables, head and stem brassicas, leafy brassica greens, root and tuber vegetables, succulent and dried shelled peas, and sunflower.

EPA Reg. No. 7969-ROT

Active Ingredients:

Boscalid - (3-pyridinecarboxamide, 2-chloro-N-(4'-chloro(1,1'-biphenyl)-2-yl))	70.0%
Inert ingredients	30.0%
Total	100.0%

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. Refer to the **Endura® fungicide** main label for precautionary statements, first aid and personal protective equipment requirements. This supplemental label must be in the user's possession during application.

General Information

Endura provides optimum disease control when applied in a regularly scheduled protective fungicide program and is used in a spray program that rotates fungicides with different modes of action. Refer to the **Endura** main label for general resistance management information and to the crop specific use recommendations and restrictions found in this label.

Application Information

Apply **Endura** according to the rate, timing, resistance management and adjuvant use recommendations in the **Crop Specific Use Directions** (Table A) in this label. Observe the additional general recommendations on application instructions, additive use and mixing order on the **Endura** main label.

Endura may be applied by ground sprayer, aerial equipment or through sprinkler irrigation systems. Refer to the **Endura** main label for specific instructions on these methods.

Restrictions and Limitations

Endura is not for use in greenhouse or transplant production systems.

Follow the restrictions and limitations outlined in the **Crop Specific Restrictions and Limitations** table (Table B) in this label for:

- Minimum pre-harvest interval (PHI)
- Maximum rate per acre
- Maximum number of applications
- Maximum rate per season
- Livestock grazing or feeding restrictions
- Aerial application restrictions

ACCEPTED
with COMMENTS
In EPA Letter Dated
JUL 23 2003

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 7969-197

Table A - **Endura® fungicide** Crop-Specific Use Directions

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Cucurbit Vegetables Chayote Chinese waxgourd Citron melon Cucumber Gherkin Pumpkin Watermelon **Edible gourd** Hyotan Cucuzza Chinese okra ***Momordica* spp.** Balsam apple Balsam pear Bitter melon Chinese cucumber **Muskmelon** Cantaloupe Casaba Crenshaw melon Golden pershaw melon Honeydew melon Honey balls Majo melon Persian melon Pineapple melon Santa Claus melon Snake melon **Summer squash** Crookneck squash Scallop squash Straightneck squash Vegetable marrow Zucchini **Winter squash** Butternut squash Calabaza Hubbard squash Acorn squash Spaghetti squash	Alternaria blight *(Alternaria cucumerina)* Gummy stem blight *(Didymella bryoniae)* **Suppression only:** Powdery mildew *(Sphaerotheca fuliginea, Erysiphecichoracearum)*	6.5 oz. per acre	4	26 oz. per acre	0 days
	Application DirectionsDirections: Begin applications of **Endura** prior to disease development and continue on a 7 to 14 day interval. Use the higher rate and the shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than four (4) applications of **Endura** per season. Do not make more than one (1) application of **Endura** before alternating to a labeled fungicide with a different mode of action for at least one (1) application.				

Table A - **Endura® fungicide** Crop-Specific Use Directions (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Brassica Leafy Vegetables: **Head and Stem Brassicas** Broccoli Chinese broccoli (gai lon) Brussels sprouts Cabbage Chinese cabbage (napa) Chinese mustard (gai choy) Cauliflower Cavalo broccolo Kohlrabi	Alternaria blight (Black spot) *(Alternaria spp.)* Grey mold *(Botrytis cinerea)* Sclerotinia stem rot *(Sclerotinia sclerotiorum, S. minor)* **Suppression only:** Powdery mildew *(Erysiphe polygoni)* Rhizoctonia bottom rot *(Rhizoctonia solani)*	6 to 9 oz. per acre	2	18 oz. per acre	0 days
	Application Directions: Begin applications of **Endura** prior to disease developmentand continue on a 7 to 14 day interval. Use the higher rate and the shorter interval when disease pressureis high. **Resistance Management:** To limit the potential for development of resistance, do not make more than two (2) applications of **Endura** per season.				

Table A - **Endura® fungicide** Crop-Specific Use Directions (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Brassica Leafy Vegetables: **Leafy Brassica Greens** Broccoli raab (rapini) Chinese cabbage (bok choy) Collards Kale Mizuna Mustard greens Mustard spinach Rape greens	Alternaria blight (Black spot) *(Alternaria spp.)* Grey mold *(Botrytis cinerea)* Sclerotinia stem rot *(Sclerotinia sclerotiorum, S. minor)* **Suppression only:** Powdery mildew *(Erysiphe polygoni)* Rhizoctonia bottom rot *(Rhizoctonia solani)*	6 to 9 oz. per acre	2	18 oz. per acre	14 days
	Application Directions: Begin applications of **Endura** prior to disease development and continue on a 7 to 14 day interval. Use the higher rate and the shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than two (2) applications of **Endura** per season.				

Table A - **Endura® fungicide** Crop-Specific Use Directions (CONT):

	Target Diseases	Use Rate per Application	ier	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
	Alternaria leaf and pod spot (*Alternaria* spp.) Ascochyta blight (*Phoma exigua, Ascochyta* spp.) Botrytis grey mold (*Botrytis cinerea)* Cercospora leaf spot (*Cercospora* spp.) Mycosphaerella blight (*Mycosphaerella* spp.) Powdery mildew (*Erysiphe* polygoni) Rust (*Uromyces appendiculatus*) White mold (*Sclerotinia sclerotiorum*)	8 to 11 oz. per acre		22 oz. per acre	7 days
	Application Directions: For optimal disease control, begin applications of **Endura** prior to disease development or at the beginning of flowering and repeat on a 5 to 14 day interval if conditions are conducive for disease development. Use the higher rate and shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than two (2 applications of **Endura** per season. **Restrictions: Do not use on cowpeas. Do not feed treated pea commodities to livestock.**				

Table A - **Endura® fungicide** Crop-Specific Use Directions (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Dried Peas Lentil *(Lens)* Pea *(Pisum)* Garden pea Green pea Pigeon pea	Alternaria leaf and pod spot *(Alternaria spp.)* Botrytis grey mold *(Botrytis cinerea)* Cercospora leaf spot *(Cercospora spp.)* Mycosphaerella blight (*Mycosphaerella* spp.) Powdery mildew *(Erysiphe polygoni)* Rust *(Uromyces* appen *diculatus)* White mold (*Sclerotinia sclerotiorum*)	8 to 11 oz. per acre	2	22 oz. per acre	21 days
	Ascochyta blight *(Phoma exigua, Ascochyta* spp.*)*	6 oz. per acre			
	Application Directions: For optimal disease control, begin applications of **Endura** prior to disease development or at the beginning of flowering and repeat on a 5 to 14 day interval if conditions are conducive for disease development. Use the higher rate and shorter interval when disease pressure is high. **Resistance Management:**To limit the potential for development of resistance, do not make more than two (2) applications of **Endura** per season. **Restrictions: Do not use on cowpeas. Do not feed treated pea commodities to livestock.**				

Table A - **Endura® fungicide** Crop-Specific Use Directions (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Root and Tuber Vegetables Arrowroot Chinese artichoke Jerusalem artichoke Edible canna Chayote (root) Ginger Leren Potato Sweet potato Turmeric	Early blight (*Alternaria solani*) Cercospora leaf spot (*Cercospora* spp.) Rust (*Coleosporium ipomoeae*) Septoria leaf spot (*Septoria* spp.)	2.5 to 4.5 oz. per acre	4	20 oz. per acre	30 days
Yam bean True yam	Sclerotinia white mold (*Sclerotinia sclerotiorum*)	5.5 to 10 oz. per acre	2		
	Application Directions: For optimal disease control, begin applications of **Endura** prior to disease development and repeat on a 7 to 14 day interval if conditions are conducive for disease development. Use the higher rate and shorter interval when disease pressure is high. For Sclerotinia white mold on potato, begin applications just prior to row closure or at the first sign of disease. A second application may be made 14 to 21 days later if conditions continue to be favorable for disease development. **Resistance Management:** To limit the potential for development of resistance, do not make more than four (4) applications of **Endura** per season. Do not make more than two (2) applications of **Endura** before alternating to a labeled fungicide with a different mode of action for at least one application. **Restrictions: Do not use on sugar beets, garden beets, turnips or radishes.**				

Table A - **Endura® fungicide** Crop-Specific Use Directions (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Root and Tuber Vegetables Carrot Ginseng Horseradish Skirret	Alternaria leaf spot *(Alternaria dauci, Alternaria* spp.*)* Cercospora leaf spot *(Cercospora* spp.*)* Grey mold rot *(Botrytis cinerea)* Powdery mildew *(Erysiphe* spp.*)* Septoria leaf spot *(Septoria* spp.*)* Watery soft rot *(Sclerotinia sclerotiorum)*	4.5 oz. per acre		22.5 oz. per acre	0 days
	Application Directions: : For optimal disease control, begin applications of **Endura** prior to disease development and repeat on a 7 to 14 day interval if conditions are conducive for disease development. Use the shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than five (5) applications of **Endura** per season. Do not make more than two (2) applications of **Endura** before alternating to a labeled fungicide with a different mode of action for at least one application. **Restrictions: Do not use on sugar beets, garden beets, turnips or radishes.**				

Table A - **Endura® fungicide** Crop-Specific Use Directions (CONT):

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Sunflower	Alternaria leaf spot *(Alternaria* spp.) Botrytis grey mold *(Botrytis cinerea)* Cercospora leaf spot *(Cercospora* spp. *)* Powdery mildew *(Erysiphe cichoracearum)* Rust *(Puccinia helianthi)* Septoria leafspot *(Septoria helianthi)* Sclerotinia head rot *(Sclerotinia sclerotiorum*	4.5 to 9 oz. per acre			21 days
	Application Directions: For optimal disease control, begin applications of **Endura** prior to disease development and continue on a 7 to 14 day interval if conditions are conducive for disease development. Use the higher rate and shorter interval when disease pressure is high. **Resistance Management:** To limit the potential for development of resistance, do not make more than five (5) applications of **Endura** per season. Do not make more than two (2) applications of **Endura** before alternating to a labeled fungicide with a different mode of action for at least one application.				

Table B - **Endura® fungicide** Restrictions and Limitations

Crop	Minimum Time from Application to Harvest (PHI) (days)	Maximum Rate per Acre per Application (oz.)	Maximum Number of Applications per Season	Maximum Rate per Acre per Season (oz.)	Livestock Grazing or Feeding	Aircraft Application
Cucurbit Vegetables Group: Cantaloupe, Cucumber, Melon, Squash, Pumpkin, Watermelon	0	6.5	4		NA[2]	Yes
Head and Stem Brassicas[1]: Cabbage Broccoli Cauliflower	0	9	2		NA	Yes
Leafy Brassica Greens[1]	14	9	2		NA	Yes
Succulent Peas (edible-podded and shelled)	7	11	2		No	Yes
Dried Shelled Peas	21	11	2		No	Yes
Root and Tuber Vegetables: Arrowroot, chinese artichoke, Jerusalem artichoke, Edible canna, Chayote (root), Ginger, Leren, Potato, Sweet potato, Turmeric, Yam bean, True yam	30	4.5 10	4 (at 4.5 oz./acre rate) 2 (at 10 oz./acre rate)	20	No	Yes
Root and Tuber Vegetables: Carrot, Ginseng, Horseradish, Skirret	0	4.5	5		No	Yes
Sunflower	21	9	2	18	Yes	Yes

[1] For a complete list of crops within a crop group, see Table A. **Endura** Crop-Specific Use Directions.

[2] NA = Not applicable

***Endura** is a registered trademark of BASF.*

NVA 2003-04-201-0029
New product supplemental label

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Agricultural Products