



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

FEB 5 2001

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Edward G. Jordon Ph.D.
BASF Corporation
26 Davis Drive
P.O. Box 13528
Research Triangle Park, NC 27709-3528

Dear Dr. Jordon:

Subject:

Revised Supplemental Non-Bearing Label

Basagran Herbicide

EPA Registration No. 7969-45

Your Letter Dated January 25, 2001

The amendment 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 labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - a. Either add the Agricultural Use Requirements section or include a referral to this section on the basic label.
  - b. For clarity add the list of non-bearing food crops to the first panel of the supplemental labeling under the heading "For use on nonbearing food crops.
- 2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

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If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

Con Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505C)

**Enclosure** 

#### Not for use in California or Florida

wjm 1-22-01 NVA 2001-04-004-0025

# Basagran

#### For use in nonbearing food crops

Basagran EPA Reg. No 7969-45

# ACCEPTED with COMMENTS In EPA Letter Dated:

FEB 5 2001

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

All applicable directions, restrictions, precautions and Conditions of Sale and Warranty on the EPA-registered label are to be followed. This labeling must be in the possession of the user at the time of herbicide application.

#### **Directions For Use**

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

Read the Precautionary Statement, Environmental Hazards, Storage and Disposal statements, and Conditions of Sale and Warranty.

General Information Basagran® herbicide is intended for selective postemergence control of certain broadleaf weeds and sedges. (See Application Rate **Table** for specific weeds.) Basagran does not control grasses. Basagran is effective mainly through contact action; therefore, weeds must be thoroughly covered with spray, Large weed-leaf canopies shelter smaller weeds and prevent adequate spray coverage. Basagran should be applied as a directed spray and away from the foliage of desired plants. A directed spray application should reduce the potential for leaf injury. However, some leaf speckling and leaf bronzing may occur under certain conditions. (See Restrictions and Limitations.)

Timing of Application
Apply Basagran early postemergence as a directed spray, when weeds are small and actively growing and before weeds reach the maximum size listed in the Application Rate Table.

Early application to weeds produces the most beneficial effect on weed control (exception: yellow nutsedge and Canada thistle), allows use of the lower rate (depending on weed species), and makes it easier to obtain thorough spray coverage. Delay in application which permits weeds to exceed the maximum size stated will result in inadequate control. Do not cultivate or mow within five days before or after application of **Basagran**.

### Water Volume and Spray Pressure

Apply recommended rates of **Basagran** as follows:

Ground Equipment: For best results, use a minimum of 20 gallons of water per acre and 40 psi pressure (measured at the boom, not at the pump or in the line). When weed foliage is dense, use up to 50 gallons of water. Use standard high-pressure pesticide flat fan or hollow cone nozzles spaced 20 inches apart. Do not use flood, whirl chamber, or controlled droplet applicator (CDA) nozzles.

### Special Information for Irrigated Areas

In irrigated areas, it may be necessary to irrigate prior to treatment with **Basagran** herbicide to ensure that weeds are growing actively. Weeds growing under drought conditions usually are not satisfactorily controlled.

#### Addition of Oil Concentrate to Spray Tank

A nonphytotoxic oil concentrate (commonly referred to as oil concentrate) should be added to the spray tank for certain weed problems as recommended in the **Application Rate Table.** 

The oil concentrate must contain either a petroleum or vegetable oil base and must meet the following criteria: 1) be nonphytotoxic, 2) contain only EPA-exempt ingredients, 3) provide good mixing quality in the jar test (see the following page), and 4) be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers which provide good mixing quality. For vegetable oil concentrates, it has been observed that highly refined vegetable oils are more satisfactory than unrefined vegetable oils.

For additional information, see Jar Test for Estimating Suitability of Oil Concentrates at the end of this section.

With the addition of oil concentrate to **Basagran**, a slight leaf burn of desirable plants may occur, but all new growth is normal, and crop vigor is not reduced. The potential for leaf burn is increased when relative humidity and temperature are high. A few oil concentrates have exhibited excessive leaf burn. However, a directed spray application should reduce the potential for leaf injury. Refer to your supplier of **Basagran** for information concerning successful local experience prior to purchasing any oil concentrate.

Rate of Oil Concentrate
Two pints in 20-50 gallons of water
per acre.



Mixing/Spraying

Clean sprayer thoroughly prior to application of **Basagran®** herbicide, particularly if a herbicide was used with the potential to injure the crop to be sprayed with **Basagran**. Fill tank of a thoroughly clean sprayer 1/2-2/3 with clean water. Start agitation and add **Basagran** and allow to mix thoroughly. Add oil concentrate and remaining volume of water. Maintain constant agitation during application.

## Jar Test for Estimating Suitability of Oil Concentrates

- Water supply: Use only water from intended source and at the source temperature.
- Amount of water in jar: Ground application: For 20 gallons per acre spray volume, use 31/3 cups (800 ml) of water. For other spray volumes, adjust proportionately.
- Amount of herbicide and oil concentrate to add: Add herbicide and oil concentrate at the rate of 1 teaspoon (5 ml) for each pint of recommended label rate.
  - Add components in following sequence, gently mixing between adding components:
    - 1) Basagran
    - 2) Oil concentrate.
  - 5. Cap jar, invert 10 cycles, let stand for 15 minutes. Evaluate.
  - 6. Evaluation: An ideal tank mix combination will be uniform; thus, the suitability of the oil concentrate is questionable if any of the following are observed:

Free oil at the surface-film or globules.

Flocculation-fine particles which may be suspended in the liquid or found as a precipitated layer at the bottom of the jar.

Clabbering-thickening texture (coagulated) resembling yogurt or a curd-like texture as with cottage cheese.

# Application Rate Table Nonbearing Food Crops

	Application Rate Table			
Weeds Controlled	1 <sup>1</sup> /2 pints per acre		2 pints per acre	
	Leaf stage	Maximum Height	Leaf stage	Maximum Height
Balloonvine	2-4	2*	4-6	3*
Beggarticks	Upto6	2" 6" 2" 6"	6-8	8 <b>"</b> 3"
Bristly Starbur	Up to 4	2*	4-6	3"
Cocklebur	2-6*	6"	6-10	10" 2" 2" 3" 8" 3" 6"
Coffee Senna	i	_	Up to 1 pinnate**	2"
Common Lambsquarters <sup>†</sup>	Upto6	11/2	4-8**	2"
Common Purslane	Up to 4	1*	4-6	2*
Common Ragweed	` <del></del>		4-6**	3"
Dayflower	Upto6	4*	6-10	8*
Devilsclaw	l <sup>-</sup> —		Up to 6**	3"
Galinsoga	ļ	<b>!</b> —	Cotyledon to 6**	2*
Giant Ragweed <sup>††</sup>		_	Up to 4	
Jimsonweed	Upto6	6"	6-10	10*
Ladysthumb	Upto6	} 6° ∣	6-10	10"
Marshelder	Up to 4	6* 2* 6* 3*	Up to 8	4"
Pennsylvania Smartweed	Upto6	J 6 <b>°</b>	6-10	10"
Prickly Sida or Teaweed	Upto 6	3"	6-8	4"
Redweed	4-6	6*	6-10	8"
Sesbania		l <del>-</del>	3-5**	3"
Shepherdspurse***	Up to 6	4"	6-10	8"
Spurred Anoda	Up to 6	3•	6-8	4"
Tropic Croton	Up to 2	2"	2-4	4"
Velvetleaf	Up to 6**	5"	4-6**	6"
Venice Mallow	Up to 6	3° 2° 5° 2° 3°	6-10	4"
Wild Buckwheat	Up to 4	3,	4-6	5"
Wild Mustard	Up to 6	4.	6-10	8"
Wild Poinsettia	2-4**	4*	4-8**	6"
Wild Sunflower	Up to 4	5 <b>*</b>	4-6	8"

For additional weeds, See Special Directions.

- Do not treat earlier than leaf stage shown, and do not count cotyledon leaves.
- \*\* Add oil concentrate according to the Directions For Use.
- Control may be partial or inconsistent.
- 11 If after the first application, a second weed flush develops, re-treat according to this rate table.
- "Do not treat rosette before the seed stalk appears.

#### **Special Directions for Other Weed Problems**

#### Canada Thistle

Apply 2 pints of **Basagran** per acre when plants are between 8 inches tall and the bud stage. Make a second application at the same rate 7-10 days later. Add oil concentrate to the spray solution of **Basagran**/water for each application, according to the **Directions For Use**.

Yellow Nutsedge

Two applications are preferred for best results. Apply 11/2-2 pints of **Basagran** per acre when plants are 6-8 inches tall. If needed, make a second application at the same rate 7-10 days later. Add oil concentrate to the spray solution of **Basagran**/water for each application, according to the **Directions For Use**.

#### Musk Thistle

Apply 2 pints of **Basagran** per acre when plants are in the rosette stage no larger than 10 inches in diameter. Make a second application at the same rate if needed. Add oil concentrate to the spray solution of **Basagran**/water for each application, according to the **Directions For Use**.

Restrictions and Limitations Do not apply Basagran® herbicide to crops listed on this label that have been subject to stress conditions such as hail damage, flooding, drought, injury from other herbicides, or widely fluctuating temperatures, as crop injury may result.

Do not apply Basagran to nonbearing food crops using aircraft or any air equipment that results in a broadcast spray application.

Do not apply Basagran during prolonged periods of drought or during unseasonably cold weather as unsatisfactory weed control may result. Rainfall or overhead irrigation soon after application (within 8 hours) may nullify the effectiveness of Basagran.

Do not apply more than 2 pints of Basagran (1.0 pounds of a. i.) per acre per application.

Do not apply more than a total of 4 pints of Basagran per acre per calendar year.

Do not apply more than a total of 2.0 pounds of bentazon a. i. (from all sources) per acre per calendar vear.

Do not graze animals in treated orchards and fields. Do not use hav from treated areas for animal feed or bedding.

Do not allow spray to contact green stems, bark, or foliage.

#### **Environmental Hazards**

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark.

Do not contaminate water when disposing of equipment wash waters or rinsate.

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

Notice: It is a violation of Federal law to use any pesticide in a manner that results in the death of an endangered species or in adverse modification of their habitat.

#### Storage and Disposal Do not allow product to freeze.

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

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal

Triple rinse container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Do not re-use empty container.

Nonbearing Food Crops Post-directed applications Basagran should be applied when weeds are actively growing and before they reach the maximum size listed in the Application Rate Table. Basagran should be applied as a directed spray and away from the foliage of desired plants. If needed, use a spray shield or wrap or cover the plants when spraying around very young trees or

The following plants are tolerant to Basagran when used as a directed spray. Do not apply within one year of harvest.

Nonbearing Food Crops

Almonds Nectarines Olives 🗸 Apples Apricots **Orandes** Avocados Peaches Blackberries\* Pears Blueberries **Pecans Pistachios** Cherries Crabapples Plums Dates

**Pomegranates** Fias Prunes Raspberries\* Grapes Grapefruit Tangelos Lemons **Tangerines** Limes Walnuts

Macadamias

<sup>\*</sup> Apply at or before planting only

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 MERCHANTABILI-TY 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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**BASF Corporation** P.O. Box 13528 Research Triangle Park, NC 27709

