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## ACCEPTED

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Revised 10/20/88

Supplemental Labeling

Basagran<sup>R</sup> herbicide Under the Federal Insecticide, Funyicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

FOR USE IN NONBEARING FOOD CROPS; ORNAMENTALS; NURSERY; OTHER NONFOOD CROPS; AND OTHER NON-CROP SITES

BASAGRAN EPA No. 7969-45

All applicable directions, restrictions, precautions and Conditions of Sale and Warranty on the 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 statement appearing on the container label.

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. Some leaf-speckling and leaf-bronzing of desirable plants may occur from foliar applications under certain conditions. (See Restrictions and limitations for each crop.)

Timing of application

Make postemergence applications of BASAGRAN early, 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 now within five days before or after application of BASAGRAN.

Water volume and spray pressure Apply recommended rates of BASAGRAN as follows:

Ground equipment: Use a minimum of 20 gals. of water per broadcast acre and a minimum of 40 psi pressure (measured at the boom-not at the pump or in the line). When weed foliage is dense use up to 100 gals. of water and up to 80 psi pressure. Use standard high pressure pesticide hollow cone or flat fan nozzles. 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 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 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 below), 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 all 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 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. Refer to your supplier of BASAGRAN for information concerning successful local experience prior to purchasing any oil concentrate.

Rate of oil concentrate:
Water volume; 20-50 gpa - use 2 pints/acre
50-100 gal - use 4 pints/acre

Mixing/spraying
Fill tank of a thoroughly clean sprayer one-half to two-thirds full
with clean water. Start agitation and add BASAGRAN; 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

- 1. Water supply: Use only water from intended source and at the source temperature.
- 2. Amount of water in jar: ground application-For 20 gas./A (adjust for higher volume) spray volume use 3 1/3 cups (800 ml) of water
- Amount of herbicide(s) and oil concentrate to add: Add herbicides and oil concentrate at the rate of 1 teaspoon (5 ml) for each pint of recommended label rate.

- 2. Add components in following sequence, gently mixing between component additions:
  - 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.

Restrictions and limitations
Do not apply BASAGRAN to crops listed on this label that have been subject to stress conditions such as hail damage, flooding, drought, or widely fluctuating temperatures, as injury may result.

Do not apply BASAGRAN if crops listed on this label show injury (leaf phytotoxicity and/or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced and/or prolonged.

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 mix or apply BASAGRAN with any other pesticide or with fertilizer except as specifically recommended on this labeling or approved supplemental labeling.

Do not apply more than 8 pints/acre in any 12 month period.

Clean sprayer thoroughly prior to application of BASAGRAN, particularly if a herbicide was used which has the potential coinjure the crop to be sprayed with BASAGRAN.

Environmental hazards
Do not apply directly to lakes, ponds or streams.

Do not contaminate water when disposing of equipment wash waters.

Notice: It is a violation of federal laws to use any pesticide in a manner that results in the death of an endangered species or 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 facility.

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 reuse empty container.

Nonbearing food crops; ornamentals; nursery; other non-food crops, and other non-crop sites. 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, unless otherwise directed.

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

## Post-Directed applications

## Nonbearing food crops

Almonds
Apples
Apricots
Avocados
Blackberries\*
Blueberries
Cherries
Crabapples
Crabapples
Cranberries
Dates
Figs
Grapes
Grapefruit
Lemons
Limes

Macadamia
Nectarines
Olives
Oranges
Peaches
Pears
Pecans
Pistachios
Plums
Pomegranates

Prunes
Raspberries\*
Tangelos
Tangerines
Walnuts

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

Party at or before planting only.

# Ornamental crops Trees

Common Name	Scientific Name				
Arborvitae	Thuja occidentalis				
Ash, Green	Fraxinus pennsylvanica				
Birch, Paper	Betula papyrifera				
Dogwood, Flowering	Cornus florida				
Dogwood, Red Osier	Cornus sericea				
Fir, Douglas	Pseudotsuga menziesii				
Fir, Frasier	Abies fraseri				
Hemlock, Canada	Tsuga canadensis				
Holly, Chinese	Ilex cornuta				
Holly, Japanese	Ilex crenata				
Locust, Honey	Gleditsia triacanthos				
Magnolia, Southern	Magnolia grandiflora				
Maple, Red	Acer rubrum				
Maple, Silver	Acer saccharinum				
Oak, Water	Quercus nigra				
Oak, Willow	Quercus phellos				
Olive, Russian	Elaeagnus angustifolia				
Pine, Austria	Pinus nigra				
Pine, Jack	Pinus banksiana				
Pine, Jap Black	Pinus thunbergii				
Pine, Jap White	Pinus parviflora				
Pine, Loblolly	Pinus taeda				
Pine, Mugho	Pinus mugho				
Pine, Red	Pinus resinosa				
Pine, Scotch	Pinus sylvestris				
Pine, Shore	Pinus contorta				
Pine, Slash	Pinus elliotti				
Pine, Southern	Pinus palustris				
Pine, Virginia	Pinus virginiana				
Pine, Western Yellow, Ponderosa					
Pine, White	Pinus ponderosa Pinus strobus				
Poplar, Hybrid	<b></b>				
Spruce, Black Hills	Populus alba				
Spruce, Col. Blue	Picea glauca				
Spruce, Norway	Picea pungens				
	Picea abies				
Spruce, White Sweet Gum	Picea glauca				
	Liquidambar styraciflus				
Sycamore	Platanus occidentalis				

#### Shrubs

Common Name Alpina Current American Cranberry Bush Arrowwood, Southern Autum: Olive Boxwood Camellia Cotoneaster, Bearberry Cotoneaster, Cranbury Forsythia Cranberry Bush Honeysuckle Honeysuckle Fly Honeysuckle, Japanese Honeysuckle, Tatarian Jojoba Juniper, Chinese Juniper, Creeping Harbor Juniper, Pfitzer Juniper, Rocky Mountain Juniper, Shore Lilac, Common Nandian Nannyberry Nicebark (var: Nanus) Rhododendron, Azalea Sandcherry, Purpleleaf Snowball Bush Spindle tree Spirea

Wayfaring Tree, Twistwood

Ribes alpinum Viburnum trilobum Viburnum dentatum Elaeagnus umbellata Buxus sempervirens Camella japonica Cotoneaster dammerii Cotoneaster apiculatus Forsythia viridissima Viburnum opulus Lonicera maackii Lonicera xylosteum Lonicera japonica Lonicera tatarica Simmondsia chinensis Juniperus chinesis Juniperus horizontalis Juniperus spp. Juniperus scopulorum Juniper conferta Syringa vulgaris Nandina domestica Viburnum lentago Physocarpus opulifolius Rhododendron spp. Prunus cistena Viburnum opulus

Euonymus kiautschovica

Spirea bumalda

Viburnum lantana Taxus cuspidata

Scientific Name

Over-the-top applications
BASAGRAN may be applied over-the-top of the ground covers,
nonbearing, non-food crops, and non-crop sites listed below.

Non-bearing food crop (Do not apply within one year of harvest.)

Common Name	Scientific Name		
Asparagus	Asparagus Officianalis		
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## **Ground Covers**

Common Name	Scientific Name		
Ivy, Algeria	Hedera canariensis		
Ivy, English	Hedera helix		
Ice Plant	Lampranthus aureus		
Ice Plant	Lampranthus spectabilis		
Ice Plant	Mesembryanthemum spp.		
Ice Plant Hottentot Fig	Carpobrotus edulis		
Liriope	Liriope muscari		
Liriope	Liriope spicata		
Pachysandra	Pachysandra terminalis		

Non-food crops (Do not apply within one year of grazing or of harvest)

Common Name	Scientific Name	
Perennial peanuts Tor nursery stock only	Arachus glabrate	

CRP (Conservation Reserve Program) Acreage and Set-aside Acreage On land which will be planted to grasses and to trees to control erosion by water or wind, BASAGRAN may be used to control annual and perennial broadleaf weeds and sedges. Grasses such as cereats or forage grasses should have 2 or more leaves at application. In tree plantings, applications should be directed toward the base of the tree.

Other Non-Crop Sites

BASAGRAN may be used in non-crop sites where grass vegetation must be maintained. Avoid drift onto other vegetation as injury may occur. A water volume sufficient to obtain adequate coverage of the weed should be used.



Application Rate Table for non bearing food crops, ornamental, nursery, other nonfood crops and rights of ways

	Application Rates for Weed Growth Stage				
Weeds Controlled	1 1//2 Pints Per Acre		2 Pints Per Acre		
	Leaf Stage	Max. Height	Leaf Stage	Max. Height	
Balloonvine	2-4	2"	4-6	3"	
Beggarticks	Up to 6	6₹	6-8	8*	
Bristly Starbur		, <del></del>	· 4-6	3"	
Cocklebur	2-6*	l 6#	6-10	10"	
Coffee Senna		, 	Up to 1	2"	
	l		Pinnate **		
Common Lambsquarters+			4-8 ** 2"		
Common Purslane	Up to 4	1 1"	4-6	l 2"	
Common Ragweed			4-6 *		
Dayflower	Up to 6	l 4"	6-10	8"	
Devilsclaw			Up to 6 *	_	
Galinsoga			Cotyledo	<u>-</u>	
_			to 6 **		
Giant Ragweed++			Up to 4	l 6"	
Jimsonweed	Up to 6	6 <b>*</b>	6-10	10"	
Ladysthumb	Up to 6	6"	6-10	10"	
Pennsylvania Smartweed	Up to 6	6 <b>"</b>	6-10	10"	
Prickly Sida or Teaweed	Up to 6	3"	6-8	4"	
Redweed	4-6	6 <sup>H</sup>	6-10	g"	
Sesbania			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	1 2	2-4	4"	
Velvetleaf	Up to 4	**2"	4-6**	5"	
Vince Mallow	Up to 6	2 H	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 11	4-8	6"	
Wild Sunflower	Up to 4	5H	4-6	, š	

For additional weeds see the following Special Directions Section.

<sup>\*</sup>Do not treat earlier than leaf stage shown and do not count cotyledon leaves.

<sup>\*\*</sup>Add oil concentrate according to the Directions for Use.

<sup>+</sup>Control may be partial or inconsistent.

<sup>++</sup>If after the first application a second weed flush develops, re-treat according to this rate table.

<sup>+++</sup>Do not treat rosette before seed stalk appears.

## Special Directions for Other Weed Problems

Canada Thistle

Apply 2 pints of BASAGRAN per acre when plants are from 8 inches tall to the bud stage. Make a second application at the same rate 7 to 10 days later.

#### Yellow Nutsedca

Two applications are preferred for best results. Apply 1 1/2 to 2 pints of BASAGRAN per acre when plants are 6 to 8 inches tall. If needed, make a second application at the same rate 7 to 10 days later. Add oil concentrate to the spray solution of BASAGRAN/water for each application, according to the Directions for Use.

### Notice to User

Due to variability within species and in application techniques neither the manufacturer nor the seller has determined whether or not BASAGRAN can be safely used on all nonbearing food crops, ornamentals, nursery and other nonfood crops under all conditions. It is therefore recommended that the professional user should determine if BASAGRAN can be used safely prior to broad use.