

## U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7504P) **Ariel Rios Building** 1200 Pennsylvania Ave., NW Washington, D.C. 20460

NOTICE OF PESTICIDE: X Registration Reregistration

(under FIFRA, as amended)

**EPA Registration** 

Date of Issuance: Number:

85678-EE

Term of Issuance: Unconditional

Name of Pesticide Product:

Bentazon 4

RedEagle International LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640

Hockessin, DE 19707

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

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 registered in accordance with FIFRA sec 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
- 2. Submit one copy of the final printed label before you release the product for shipment.
- 3. Generate the studies for one year storage stability (830.6317) and corrosion characteristics (830.6320) for the proposed product and the results must be submitted to the Agency for evaluation. It is recommended that the observations should be made at 0.3.6.9 and 12 month intervals.
- 4. Add Registration number 85678-22 to label.
- 5. Add EPA establishment number and net. content to label.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec 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.

If you have any questions regarding the Notice, please contact Grant Rowland at (703) 347-0254 or rowland.grant@epa.gov.

Signature of Approving Official; Kathryn Montague **Product Manager 23** 

Herbicide Branch

Registration Division (7505P)

Date:

#### **BENTAZON 4**

For postemergence use in beans, corn, peanuts, peas, peppermint, rice, sorghum, soybeans and spearmint

For control of broadleaf weeds and sedges in turfgrass, ornamentals, and other noncropland sites as listed in Directions For Use.

For homeowner use to control broadleaf weeds, annual sedges, and yellow nutsedge in turfgrass and ornamentals.

**Active Ingredient:** 

Sodium salt of bentazon

# CAUTION / PRECAUCION

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.)

	FIRST AID
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT induce vomiting unless told to do so by a poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222. For chemical emergency assistance (spill, leak, fire, or accident) call ChemTrec at 1-800-424-9300.

See inside [booklet] for complete First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty, and state-specific crop and/or use site restrictions. EPA Reg. No. 85678
EPA Est No.

**Net Contents:** 

Manufactured for: RedEagle International LLC 1925 E Edgewood Drive, Ste 105 Lakeland, FL 33803

JAN - 6 2012

ACCEPTED

Under the Federal Insecticide, Findinia, and Redesticide Act, as submided, for his pesticide resistand under 1000

<sup>\*</sup> Equivalent to 4 pounds of bentazon per gallon.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION**. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber, Selection Category A). Wear protective eye wear. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

## Personal Protective Equipment (PPE)

## Applicators and other handlers must wear:

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

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, 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**

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.

## **DIRECTIONS FOR USE [Agricultural]**

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.

Unless otherwise directed in supplemental labeling, all applicable directions, restrictions, precautions and Conditions of Sale and Warranty are to be followed. This labeling must be in the user's possession during application.

#### 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 48 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
- Chemical resistant gloves (such as Natural Rubber)

#### **Nonagricultural Use Requirements**

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

#### For non-WPS occupational use:

DO NOT enter or allow others to enter the treated area until sprays have dried.

#### For homeowner use:

DO NOT allow persons or pets to enter the treated area until sprays have dried.

## PRODUCT INFORMATION [Agricultural]

Bentazon 4 is intended for selective postemergence control of certain broadleaf weeds and sedges in beans, corn, peanuts, peas, peppermint, rice, sorghum, soybeans, and spearmint. Bentazon 4 does not control grasses.

#### **Mode of Action**

Bentazon 4 is effective mainly through contact action; therefore, weeds must be thoroughly covered with spray.

## **Crop Tolerance**

All labeled crops are tolerant to Bentazon 4. Leaf speckling or bronzing may occur, but plants generally outgrow this condition within 10 days. New growth is normal and crop vigor is not reduced.

## **Cleaning Spray Equipment**

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and then triple rinsing the equipment before and after applying this product.

#### **APPLICATION INSTRUCTIONS**

Applications can be made to actively growing weeds as broadcast, band, or spot spray applications at the rates and growth stages listed in the weed tables. The most effective control will result from making postemergence applications of Bentazon 4 early, when weeds are small. Early application produces the most beneficial effect on weed control (exceptions: yellow nutsedge and Canada thistle), allows use of the lower rate (depending on weed species), and makes thorough spray coverage easier to obtain. Delaying application permits weeds to exceed the maximum size stated and will prevent adequate control. **DO NOT** apply when conditions favor drift from target area or when windspeed is greater than 10 mph. Apply recommended rates of Bentazon 4 to actively growing weeds before they reach the maximum sizes listed in **Table 1. Application Rates for Specific Weed Growth Stages For All Crops Except Rice**. For the recommended use rates of Bentazon 4 in rice, refer to **Table 3. Application Rates for Rice - Flooded Fields** and **Table 4. Application Rates for Rice - Drained Fields** in **Crop-Specific Information** section.

#### Irrigation

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth because weeds growing under drought conditions usually are not satisfactorily controlled.

#### **Spray Coverage**

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

#### Cultivation

**DO NOT** cultivate within 5 days before applying Bentazon 4 or 7 days after application. Timely cultivation after 7 days may help provide season-long control.

## **Aerial Application Methods and Equipment**

Water Volume: Use a minimum of 5 gallons of water per acre (except 10 gallons for rice).

Spray Pressure: Use up to 40 psi.

**Application Equipment**: Use only diaphragm-type nozzles that produce cone or fan spray patterns.

**Nozzles**: Nozzles must not be more than 10 feet above the crop. Nozzles must be oriented to discharge straight back with the air stream (opposite the direction of travel of the aircraft) or at some angle between straight back and straight down.

## **Special Directions for Aerial Application**

To obtain uniform coverage and to avoid drift hazards, follow these guidelines:

- DO NOT apply Bentazon 4 by aircraft when wind is blowing more than 10 mph (except above 5 mph in California).
- Use coarse sprays (larger droplets) as they are less likely to drift.
- DO NOT apply Bentazon 4 by air if sensitive species (such as cotton, sugar beets, sunflowers, or okra) are within 200 feet downwind.

The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

## **Ground Application Methods and Equipment (Broadcast)**

Water Volume: Use 10 to 20 gallons of spray solution per broadcast acre for optimal performance.

**Spray Pressure**: Use a minimum of 40 psi (measured at the boom, not at the pump or in the line).

**Note**: When using the lower volume (i.e. 10 gallons per acre) or when crop and weed foliage is dense, use a minimum of 60 psi for best results.

**Application Equipment**: Use standard high-pressure pesticide flat fan or hollow cone nozzles spaced up to 20 inches apart. DO NOT use flood, whirl chamber, or controlled droplet applicator (CDA) nozzles as erratic coverage can cause inconsistent weed control. DO NOT use selective application equipment such as recirculating sprayers or wiper applicators. Good coverage is essential for maximum control.

Bentazon 4 can be used in the following crops:

Beans, dry

Corn

Peas, succulent

Sorghum

Beans, succulent

Peanuts

Peppermint

Soybeans

Peas, dry

Rice

Spearmint

Weeds Controlled			Bentazo	n 4 Rates P	er Acre**	
(includes ALS- and triazine-resistant	1 pint	per acre <sup>1</sup>	1.5 pint	s per acre	2 pints p	er acre
biotypes)	Leaf Stage	Maximum Height	Leaf Stage	Maximum Height	Leaf Stage	Maximum Height
Anoda, spurred	-	_	Up to 6	3"	6-8	4"
Balloonvine			2-4	2"	4-6	3"
Beggarticks	-	_	Up to 6	6"	6-8	8"
Bindweed (field, hedge) <sup>6</sup>	-	-	-	-		10"
Buckwheat, wild	_	- 100	Up to 4	3"	4-6	5"
Canada Thistle <sup>7</sup>	_			_	_	8" to bud
Cocklebur <sup>2,9</sup>	2-4	4"	2-6	6"	6-10	10"
Croton, tropic	_	_	Up to 2	2"	2-4	4"
Dayflower	_	_	Up to 6	4"	6-10	8"
Devilsclaw <sup>3</sup>					Up to 6	3"
Eclipta	_	- 1000	Up to 6	2"	Up to 6	2"
Galinsoga <sup>3</sup>	-	_			Cotyledon to 6	2"
Groundsel, common				_		3"
Jimsonweed	Up to 4	4"	Up to 6	6"	6-10	10"
Ladysthumb	Up to 4	4"	Up to 6	6"	6-10	10"
Lambsquarters, common <sup>3,4</sup>	Up to 4	1"	Up to 6	1.5"	Up to 6	2"
Marshelder	-	-	Up to 4	2"	Up to 8	4"
Mayweed/dogfennel		F. H. C.		2"		3"
Morning glory <sup>10</sup> (smallflower, cypressvine only)	-	_	4	4"	4	4"
Morning glory	_		4	4"	6	6"
Mustard, wild	Up to 4	2"	Up to 6	4"	6-10	8"
Nightshade, hairy <sup>12</sup>	_	_	_ 1 101	_	2-6	4"
Nutsedge, yellow <sup>7</sup>	_	_	-1.	8"		8"
Poinsettia, wild <sup>3</sup>	_	-	Up to 6	4"	4-8	6"
Purslane, common	_	_	Up to 4	1"	4-6	2"
Radish, volunteer	_		2-6	4"	6-10	10"
Ragweed, common <sup>3</sup>	_	-0.00	_	_	4-6	3"
Ragweed, giant <sup>4</sup>	_	_		_	Up to 4	6"
Redweed		_	4-6	6"	6-10	8"

Weeds Controlled (includes ALS- and	Bentazon 4 Rates Per Acre**							
	1 pint per acre <sup>1</sup>		1.5 pints per acre		2 pints per acre			
triazine-resistant biotypes)	Leaf Stage	Maximum Height	Leaf Stage	Maximum Height	Leaf Stage	Maximum Height		
Senna, coffee <sup>3</sup>				-	Up to 1 pinnate	2"		
Sesbania <sup>3</sup>					3-5	3"		
Shepherdspurse <sup>5</sup>	_		Up to 6	4"	6-10	8"		
Sida, prickly or teaweed		_	Up to 6	3"	6-8	4"		
Smartweed, Pennsylvania	Up to 4	4"	Up to 6	6"	6-10	10"		
Starbur, bristly	- 774	_	Up to 4	2"	4-6	3"		
Sugar beet, volunteer	-	- 2 19	2-4	-	4-8	_		
Sunflower wild	Up to 2	3"	Up to 4	5"	4-6	8"		
Velvetleaf <sup>8,11</sup>	Up to 4	2"	Up to 4	2"	4-6	5"		
Venice Mallow	Up to 4	2"	Up to 6	2"	6-10	4"		

<sup>&</sup>lt;sup>1</sup>If regrowth develops; make a second application of 1 pint 7 to 14 days later. (This rate not applicable in California.)

<sup>&</sup>lt;sup>2</sup>DO NOT treat earlier than leaf stage shown and DO NOT count cotyledon leaves.

<sup>&</sup>lt;sup>3</sup>Use crop oil concentrate or crop oil concentrate plus UAN.

<sup>&</sup>lt;sup>4</sup>For regrowth or new germination, a follow-up application of Bentazon 4 may be necessary.

DO NOT treat rosette before seed stalk appears.

<sup>&</sup>lt;sup>6</sup>In KY, IL, IN, MI, and OH, apply 2 to 3 pints of Bentazon 4 per acre (for suppression only) <sup>7</sup>If regrowth occurs; make a second application at the same rate 7 to 10 days later.

<sup>&</sup>lt;sup>8</sup>Late Rescue Treatment for Velvetleaf: Make a single application of 3 pints per acre of Bentazon 4 plus 1 quart of oil concentrate per acre and 1 gallon of UAN solution per acre to velvetleaf plants up to 12". For better control, apply 1.5 pints per acre of Bentazon 4 plus 1 quart of oil concentrate and 1 gallon of UAN or AMS solution per acre, followed by a second application at the same rate in 4 to 7 days.

<sup>&</sup>lt;sup>9</sup>Late Rescue Treatment for Cocklebur: Make a single application of 2 to 3 pints per acre of Bentazon 4 to plants up to 24". For better control, apply 1.5 pints per acre of Bentazon 4. Repeat 10 to 14 days later.

<sup>&</sup>lt;sup>10</sup>Rates given for southern states only (AL, AR, FL, GA, LA, MS, NC, OK, SC, TN, TX, and VA). Make a second application 5 to 14 days later. For all states other than the South, apply 2 to 3 pints of Bentazon 4 per acre to annual morning glories not larger than 4 true leaves. Control may be partial or inconsistent.

<sup>&</sup>lt;sup>11</sup> Always use UAN or AMS as spray additive.

<sup>&</sup>lt;sup>12</sup>Bentazon 4 does not control black nightshade or Eastern black nightshade.

<sup>\*</sup>For the recommended use rates of Bentazon 4 in rice, refer to Table 3. Application Rates for Rice - Flooded Fields and Table 4. Application Rates for Rice - Drained Fields in Crop-Specific Information section.

\*\*Refer to Crop-Specific Information for Crop-Specific Restrictions and Limitations.

#### **ADDITIVES**

To achieve consistent weed control, one of the following additives is needed: crop oil concentrate, urea ammonium nitrate, or ammonium sulfate. Additives may cause some leaf burn, but new growth is normal and crop vigor is not reduced. The potential for leaf burn is increased when relative humidity and temperature are high. See **Table 2**. **Additive Rate Per Acre** for additive rates.

#### **Oil Concentrate**

A nonphytotoxic oil concentrate may be added to the spray tank for certain weed problems. The oil concentrate must contain either a petroleum oil or vegetable oil base and must meet all of the following criteria:

- · be nonphytotoxic,
- contain only EPA-exempt ingredients,
- · provide good mixing quality in the jar test, and
- be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see **Application Mixing Information**.

Adding an oil concentrate may cause some leaf burn, but new growth is normal and crop vigor is not reduced. The potential for leaf burn is increased when relative humidity and temperature are high. Some oil concentrates cause excessive leaf burn, so refer to your supplier for information concerning successful local experience before purchasing any oil concentrate.

#### Oil Concentrate + Nitrogen Solution

A nonphytotoxic oil concentrate (as referred to above) plus a nitrogen solution (UAN or AMS) can be added to the spray tank with Bentazon 4.

#### **Urea Ammonium Nitrate (UAN)**

Commonly referred to as 28%, 30% or 32% nitrogen solution, UAN may be added in place of other spray additives to improve control of cocklebur, devils claw, Pennsylvania smartweed, velvetleaf, Venice mallow, wild mustard, and wild sunflower. Bentazon 4 plus a nitrogen solution will not provide adequate control of common ragweed and common lambs quarters. If these weeds or other weeds requiring oil concentrate are present in addition to velvetleaf, then oil concentrate should also be used.

#### Ammonium Sulfate (AMS)

When used, add 3 quarts of liquid AMS (8-8-0 analysis) or 2.5 pounds of granular AMS. Use only fine feed-grade or spray-grade AMS because inferior grades of AMS do not dissolve adequately and can plug spray nozzles. RedEagle International does not recommend applying AMS if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience.

Table 2. Additive Rate Per Acre

Additive	Ground Application	Air Application
AMS <sup>1</sup>	2.5 pounds	2.5 pounds <sup>2</sup>
Oil Concentrate	1-2 pints	1 pint
UAN Solution <sup>1</sup>	4-8 pints	2-4 pints
Oil Concentrate	0.5-1 pint	
+ Nitrogen <sup>1</sup>	+	
	2-4 pints of UAN	
	or	
	1-2 pounds of AMS	

<sup>&</sup>lt;sup>1</sup>AMS and UAN are not for use in California.

## **Application Mixing Information**

Additives and/or other pesticides may be mixed in the spray tank with Bentazon 4 using the information in this section.

## **Tank Mix Partners/Components**

The following products may be tank mixed with Bentazon 4 according to the specific tank mixing instructions in this label and respective product labels.

- Atrazine
- Acifluorfen 2<sup>®</sup>/acifluorfen
- Buctril<sup>®</sup>/bromoxynil
- Clarity<sup>®</sup>/dicamba
- Classic<sup>®</sup>/chlorimuron
- Cobra<sup>®</sup>/lactofen
- Concert<sup>®</sup>/thifensulfuron + chlorimuron
- Distinct/<sup>®</sup> diflurfenzopyr + dicamba
- Facet<sup>®</sup> 75 DF/quinclorac
- FirstRate<sup>®</sup>/cloransulam-methyl
- Flexstar/fomesafen
- Londax<sup>®</sup>/bensulfuron
- Liberty<sup>®</sup>/glufosinate
- Lightning<sup>®</sup>/imazethepyr + imazapyr
- Marksman<sup>®</sup>/atrazine + dicamba
- MCPA
- Outlook<sup>®</sup>/dimethenamid-P
- Paramount<sup>®</sup>/quinclorac

- Pinnacle<sup>®</sup>/thifensulfuron
- Poast<sup>®</sup>/sethoxydim
- Poast Plus<sup>®</sup>/sethoxydim
- Propanil
- Pursuit<sup>®</sup>/imazethapyr
- Raptor<sup>®</sup>/imazamox
- Reflex/fomesafen
- Reliance<sup>®</sup> STS<sup>®</sup>/chlorimuron + thifensulfuron
- Resource<sup>®</sup>/flumiclorac
- Roundup Ultra/glyphosate
- Scepter<sup>®</sup>/imazaquin
- Sinbar<sup>®</sup>/terbacil
- Paraquat
- Stinger<sup>®</sup>/clopyralid
- Storm<sup>®</sup>/bentazon + acifluorfen
- Synchrony® STS®/chlorimuron + thifensulfuron
- Thistrol<sup>®</sup>/MCPB
- 2,4-DB

See Crop-Specific Information for more details. Read and follow the applicable Restrictions and Limitations and Directions For Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Separate applications should be made if all target weeds are not at the labeled growth stage for treatment at the same time.

<sup>&</sup>lt;sup>2</sup>AMS solution is not recommended due to potential precipitation problems in reduced water volumes. AMS can be used provided a minimum of 10 gallons of solution per acre is applied. Use only if the source of AMS has been demonstrated to be successful in local experience.

**Compatibility Test for Mix Components** 

RedEagle International LLC Draft master label for Initial registration

Physical incompatibility, reduced weed control, or crop injury may result from mixing Bentazon 4 with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. RedEagle International LLC does not recommend using tank mixes other than those listed on RedEagle International LLC labeling. Local agricultural authorities may be a source of information when using other than RedEagle International LLC-recommended tank mixes.

Before mixing additives and/or other pesticides, always perform a compatibility jar test. For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature. Add components in the sequence indicated in the Mixing Order using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre. Always cap the jar and invert 10 cycles between component additions. When the components have all been added to the jar, let the solution stand for 15 minutes. 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. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, DO NOT mix the ingredients in the same tank.

## **Mixing Order**

When mixing additives and/or other pesticides in a spray tank, add the products to be used in the following sequence:

- 1) Water. Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- 2) Agitation. Maintain constant agitation throughout mixing and application.
- 3) Products in PVA bags. Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4) Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions). If an inductor is used, rinse it thoroughly after the component has been added.
- 5) Water-soluble products (such as Bentazon 4). If an inductor is used, rinse it thoroughly after the component has been added.
- 6) Emulsifiable concentrates (such as oil concentrate when applicable). If an inductor is used, rinse it thoroughly after the component has been added.
- 7) Water-soluble additives (such as AMS or UAN when applicable). If an inductor is used, rinse it thoroughly after the component has been added.
- 8) Remaining quantity of water.

  Maintain constant agitation during application.

## **Restrictions and Limitations - All Crops**

- Maximum seasonal use rate: DO NOT apply more than a total of 4 pints of Bentazon 4 per acre, per season.
- DO NOT apply more than a total of 2.0 pounds of bentazon ai (from all sources) per acre, per season.
- Restricted-Entry Interval (REI): DO NOT enter or allow worker entry into treated areas during the restricted entry interval of 48 hours.
- DO NOT apply to weeds under stress such as lack of moisture, herbicide injury, mechanical injury or cold temperatures, as unsatisfactory control may result.
- DO NOT apply to crops subjected 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 to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications because this injury may be enhanced or prolonged.
- Rainfast period: Rainfall or overhead irrigation within 4 hours after application may reduce the effectiveness of Bentazon 4.
- DO NOT apply through any type of irrigation system.

## **Crop-Specific Information**

Apply Bentazon 4 early postemergence before weeds reach the maximum size listed in Table 1. Application Rates for Specific Weed Growth Stages for All Crops Except Rice (for rice, see rice section below).

## Beans, Dry and Succulent

Beans are tolerant to Bentazon 4 after the first trifoliate leaf has fully expanded. Even at the tolerant stages, yellowing, bronzing, speckling or burning of leaves may occur under certain conditions (see Crop-Specific Restrictions and Limitations). This temporary injury is generally outgrown without delaying podset or maturity or reducing yield. Using oil with Bentazon 4 may increase injury and may reduce yields.

Tolerant bean types are adzuki, navy, pinto, pink, great northern, kidney, red, white, cranberry, black turtle soup, small lima, large lima, and snap beans.

#### **Crop-Specific Restrictions and Limitations**

DO NOT apply Bentazon 4 as a solo treatment to dry and succulent beans grown in Georgia and South Carolina as severe crop damage may occur. Bentazon 4 may be applied from 6 to 16 fluid ounces per acre to dry and succulent beans grown in Georgia and South Carolina but only when tank mixed with Raptor® herbicide or Pursuit® herbicide. Refer to the Raptor and Pursuit labels for additional use directions or restrictions.

DO NOT apply Bentazon 4 to bean fields until beans have at least the first trifoliate leaf fully expanded because severe crop damage may occur.

DO NOT apply Bentazon 4 to blackeyes grown in California or to garbanzo beans or lupines at any stage of growth, as severe crop damage may occur.

DO NOT apply Bentazon 4 to dry or succulent beans within 30 days of harvest.

Use of an oil additive with Bentazon 4 on snap beans may increase the leaf burn and injury potential.

California Only: Not recommended for use on adzuki beans. For yellow nutsedge control, apply 2 pints of Bentazon 4 per acre when plants are 6 to 8 inches tall. Make a second application at the same rate 10 to 14 days later.

## **Tank Mixes - Dry Beans**

Bentazon 4 may be applied in a tank mix with one of the following herbicides:

- Outlook®
- Pursuit®
- Poast®
- Raptor<sup>®</sup>

## **Tank Mixes - Succulent Beans**

Bentazon 4 may be applied in a tank mix with one of the following herbicides:

- Poast<sup>®</sup>
- Pursuit<sup>®</sup>

## **Corn and Sorghum**

Corn types include field, sweet, popcorn, and corn grown for seed or silage. Sorghum types include grain and forage sorghum. Seed producers should consult the seed company regarding tolerance of seed production inbred lines to Bentazon 4.

## **Crop-Specific Restrictions and Limitations**

Apply no more than 2 pints of Bentazon 4 per acre per season in sorghum.

DO NOT apply to sorghum that is heading or blooming.

DO NOT graze treated corn and sorghum fields for at least 12 days after the last treatment with Bentazon 4.

California only: Not recommended for controlling yellow nutsedge in corn or sorghum. DO NOT use on forage sorghum.

## Tank Mixes - Corn and Sorghum

The tank mix of Bentazon 4 + atrazine is not applicable in California.

Bentazon 4 may be applied in a tank mix with one of the following herbicides on corn (including herbicides registered for use in corn hybrids tolerant to glyphosate, glufosinate and imidazolinone):

- Atrazine
- Marksman®
- Clarity®
- Outlook®
- Distinct®
- Pursuit®
- · Liberty®
- RoundUp Ultra®
- Lightning™

Bentazon 4 may be applied in a tank mix with one of the following herbicides in sorghum:

- Atrazine
- · Outlook®
- Clarity<sup>®</sup>
- Paramount<sup>®</sup>
- Marksman<sup>®</sup>

## **Peppermint and Spearmint**

Peppermint and spearmint are tolerant to Bentazon 4; however, some leaf burning may occur under certain conditions, such as when plants are growing very actively and have extensive new, succulent tissue. Mint plants generally outgrow this condition within 10 days.

For hairy nightshade and kochia control, Bentazon 4 may be used up to 4.0 pints per acre as a single application.

For kochia control, add oil concentrate.

## **Tank Mixes - Peppermint and Spearmint**

Bentazon 4 may be applied in a tank mix with one of the following herbicides:

• Buctril®

• Sinbar®

• Poast®

Stinger<sup>®</sup>

## Peas, Dry and Succulent

Peas are tolerant to Bentazon 4 after 3 pairs of leaves (or 4 nodes) are present. Pea injury such as yellowing, bronzing, speckling or burning of leaves may occur under certain conditions. This temporary injury is generally outgrown without delaying podset or maturity or reducing yield. Tolerant pea types are garden, English, and southern peas.

In western irrigated areas, avoid applying Bentazon 4 during prolonged periods of cold weather (day temperature below 75° F and night temperature below 55° F for 2 to 5 days) because weed control may be nullified.

## **Crop-Specific Restrictions and Limitations**

- DO NOT apply Bentazon 4 as a solo treatment to dry and succulent peas grown in Georgia and South Carolina as severe crop damage may occur. Bentazon 4 may be applied from 6 to 16 fluid ounces per acre to dry and succulent peas grown in Georgia and South Carolina but only when tank mixed with Raptor® herbicide or Pursuit. Refer to the Raptor and Pursuit labels for additional use directions or restrictions.
- DO NOT apply Bentazon 4 to dry peas within 30 days of harvest.
- DO NOT apply Bentazon 4 to succulent peas within 10 days of harvest.
- In California, DO NOT apply to succulent peas within 30 days of harvest.
- DO NOT apply Bentazon 4 to peas under stress from root rot.
- DO NOT apply Bentazon 4 to blackeyes grown in California or to garbanzo beans or to lupines at any stage of growth, as severe crop damage may occur.
- DO NOT apply Bentazon 4 when peas are in bloom.
- DO NOT add oil to Bentazon 4 for use on peas, except for use in the Pacific Northwest (PNW).
- Infurrow treatments of insecticides or nematicides may also predispose the peas to injury from Bentazon 4.

#### **Tank Mixes - Peas**

Tank mixes not applicable in California.

Bentazon 4 may be applied in a tank mix with one of the following herbicides:

·MCPA

·Raptor®

·Pursuit®

•Thistrol®

The **Bentazon 4 + Thistrol tank mix** is for use in ME, NH, VT, MA, CT, RI, NY, PA, NJ, VA, MD, DE, WA, ID, and OR. This tank mix should be applied after the 3-leaf stage (4-node stage) of peas, but not later than 3 nodes before pea flowering.

**Notice to user**: Due to variability among pea cultivars and in application techniques, neither the manufacturers nor the sellers have determined whether or not the tank mix of Bentazon 4 + Thistrol can be safely used on all pea crops under all conditions. Therefore, determine if the tank mix of Bentazon 4 + Thistrol can be used safely prior to broad use.

For improved control of pigweed species and common lambsquarters, a tank mix of Bentazon 4 + MCPA may be used.

#### **Tank Mix Restrictions and Limitations**

- DO NOT use crop oil concentrate, other oil-based additives, or any other spray additives
  or surfactants with these tank mixes.
- DO NOT apply the tank mix to peas when temperatures exceed 90° F.
- DO NOT apply the tank mix to peas after pea flower buds appear.
- Crops other than peas may be severely injured by drift. Cotton, beans, grapes, tomatoes, and ornamentals are particularly sensitive to Thistrol.

#### **Peanuts**

Bentazon 4 can be applied from peanut cracking through pegging.

Peanut hay and forage may be fed to livestock.

In-furrow treatments of insecticides and nematicides may predispose peanuts to injury from Bentazon 4.

## **Crop-Specific Restrictions and Limitations**

DO NOT graze treated peanut fields for at least 50 days after the last Bentazon 4 treatment.

#### Tank Mixes - Peanuts

Tank mixes not applicable in California.

Bentazon 4 may be applied in a tank mix with one of the following herbicides:

- •Acifluorfen •Star-fire®
- 2®
- •Outlook® •2,4-DB amine
- ·Poast®

The **Bentazon 4 + Paraquat tank mix** should be applied at the ground crack stage of peanuts to control an early flush of weeds. A second application may be applied up to 28 days after ground crack stage. Always add a nonionic surfactant containing at least 50% surface active agent at recommended rates to the Bentazon 4 + Paraquat tank mix.

#### **Tank Mix Restrictions and Limitations**

- DO NOT include UAN solution or ammonium sulfate when tank mixing Bentazon 4 + Acifluorfen 2 + Poast.
- DO NOT use crop oil concentrate or any other oil-based additive with the Bentazon 4 + Paraquat tank mix.
- DO NOT add oil concentrate, UAN, or any other additives to Bentazon 4 + 2,4-DB tank mix.
- · Use only amine formulations of 2,4-DB.

#### Rice

## **Application Information**

Not for use in California.

Apply Bentazon 4 early postemergence, before weeds exceed the maximum size listed in Tables 3 and 4.

**Application Equipment** 

For optimal coverage when applying Bentazon 4 by air in rice, orient all nozzles straight back. Nozzles must not be located farther out than three-fourths the distance from the center of the aircraft to the end of the wing or rotor.

**Alternate Flooding Culture** 

In Texas, Louisiana, Arkansas, and Mississippi, weed growth stages generally correspond to rice that is tillering (stooling) and occur before the permanent flood. Bentazon 4 must be applied when there is no water on the field and 24 hours or more prior to flooding.

If Bentazon 4 cannot be applied until after flooding, see directions under Continuous Flooding Culture.

**Continuous Flooding Culture** 

In states using continuous flooding culture, or when treating after the permanent flooding, treatment should be made only when weeds are above the surface of the water. Weeds submerged at the time of application will not be adequately controlled. For early treatment, water may be partly or completely drained to expose more weed growth to spray applications of Bentazon 4. DO NOT raise water level for at least 24 hours after application as unsatisfactory control may result. DO NOT use ground equipment to apply to flooded fields because splashing will wash Bentazon 4 off weed leaf surfaces and ineffective control may result.

## **Crop-Specific Restrictions and Limitations**

- Rice straw may be fed to livestock.
- DO NOT use Bentazon 4 on rice fields in which the commercial cultivation of catfish or crayfish is practiced.
- DO NOT use water containing Bentazon 4 residues from rice cultivation to irrigate crops used for food or feed unless Bentazon 4 is registered for use on these crops.
- DO NOT apply more than 4 pints of Bentazon 4 per acre per season whether one or two rice crops (including ratoon) are grown that season.

#### Tank Mixes - Rice

Bentazon 4 may be applied in a tank mix with one of the following herbicides:

- Acifluorfen 2
- Propanil
- · Facet® 75 DF
- Storm®
- · Londax®

When using Storm<sup>®</sup> herbicide in a tank mix, use 1.5 pints of Storm with 0.5 to 1.0 pint of Bentazon 4 per acre.

#### **Tank Mix Restrictions and Limitations**

- Apply the Bentazon 4 + Londax tank mix within 7 days of establishing permanent flood.
- · Apply the Bentazon 4 + propanil tank mix only to drained fields.
- DO NOT use crop oil concentrate with the Bentazon 4 + propanil tank mix.
- Add propanil to the tank mix of Bentazon 4 based on active ingredient (ai) of formulation used.
- · Test propanil products for physical tank mix compatibility with Bentazon 4.
- Apply the Bentazon 4 + Storm tank mix after the 3-leaf stage in rice.

The state of the s	n Rates for Rice - Flooded Fields Application Rates for Weed Growth Stages <sup>1</sup>						
	1.5 pints per ac		2 pints per acre				
	Maximum Height Above Soil	Height Range Above Water Level	Maximum Height Above Soil	Height Range Above Water Level			
Cocklebur	10"	3-6"	15"	6-10"			
Dayflower	6"	3-5"	10"	5-8"			
Redstem	4"	2-3"	8"	4-6"			
Smartweed	6"	2-5"	10"	5-8"			
Water plantains							
Arrowhead			7"	5-6"			
Common			7"	5-6"			
Yellow nutsedge	6"	4-5"	10"	6-8"			

<sup>1</sup>If a second weed flush develops after the first application, re-treat according to this rate table.

weeds Controlled	Application R	ates for Weed G	rowth Stages'	
	1.5 pints per a	acre	2 pints per ac	re
	Leaf Stage	Maximum Height	Leaf Stage	Maximum Height
Cocklebur	2-10	10"	10-15	15"
Dayflower	2-10	6"	10-15	10"
Ducksalad			6-10	6"
Eclipta	4-6	2"	4-6	2"
Gooseweed	4-6	4"	6-10	8"
Redstem	up to 6	4"	6-10	8"
Redweed	4-6	6"	6-10	8"
Smartweed	2-10	6"	10-15	10"
Spikerush	2-6	6"	6-8	8"
Water plantains				
, arrowhead			up to 4	7"
, common			up to 4	7"
Yellow nutsedge	4-6	6"	6-8	10"

<sup>1</sup>If a second weed flush develops after the first application, re-treat according to this rate table.

## Soybeans

Soybeans are tolerant to Bentazon 4 at all stages of growth. Slight leaf speckling and leaf bronzing may occur under certain conditions, but crops generally outgrow these conditions within 10 days.

## **Crop-Specific Restrictions and Limitations**

DO NOT graze or cut treated soybean fields for forage or hay for at least 30 days after the last treatment of Bentazon 4.

## Tank Mixes - Soybeans

Tank mixes not applicable in California.

Bentazon 4 may be applied in a tank mix with one of the following herbicides (including RoundUp Ready<sup>®</sup>, LibertyLink<sup>®</sup>, and STS<sup>™</sup> varieties):

- Acifluorfen 2<sup>®</sup>
   Poast Plus<sup>®</sup>
- · Classic®\*
- · Pursuit®
- Cobra®
- · Raptor®
- · Concert®\*
- Reflex
- FirstRate®\*
- · Reliance® STS®\*
- Flexstar
- · Resource®
- Liberty®
- Roundup Ultra
- Outlook®
- Scepter<sup>®</sup>
- Pinnacle®\*
- Synchrony<sup>®</sup> STS<sup>®</sup>
- · Poast®
- · 2,4-DB amine

#### Bentazon 4 + Acifluorfen 2 + Poast

#### **Tank Mix Restrictions and Limitations**

Oil concentrate must be used with the Bentazon 4 + Acifluorfen 2 + Poast tank mix in place of a spray surfactant.

## Bentazon 4 + Reliance STS

#### **Tank Mix Restrictions and Limitations**

DO NOT add oil concentrate to this tank mix for use with soybean varieties other than those designated as STS.

#### Bentazon 4 + 2,4-DB amine

Use only amine formulations of 2,4-DB.

Use no other adjuvant except UAN at 2 to 4 pints per acre with this tank mix.

<sup>\*</sup>For these tank mixes, the use of a nonionic surfactant (1 to 2 pints per 100 gallon) plus UAN (2 to 4 pints per acre) is recommended.

### **Tank Mix Restrictions and Limitations**

DO NOT apply more than 1 application of this tank mix per season.

The use of this tank mix will cause soybean foliage injury (such as burning, bronzing or crinkling) and may reduce yields.

DO NOT use this tank mix on soybeans that show symptoms of disease such as Phytophthora root rot.

## Mixing with Insecticides

A need may arise that requires postemergence or foliar control of certain insects in the soybean crop. It is possible to tank mix an insecticide with Bentazon 4 if the proper application timing of the insecticide coincides with the application timing of Bentazon 4.

Insecticides that may be used are Furadan® 4F, Pounce®, Pydrin®, dimethoate, and Lorsban® 4E. DO NOT tank mix Bentazon 4 with malathion or Sevin®. The tank mix addition of an insecticide to Bentazon 4 may increase the potential for crop injury.

The exact conditions under which an insecticide is tank mixed with Bentazon 4 may vary and these conditions may reduce good mixing quality.

Before a tank mix of Bentazon 4 and an insecticide is used test the combination as instructed by the Compatibility Test for Mix Components.

## **DIRECTIONS FOR USE [Turf and Ornamental- Commercial]**

Bentazon 4 is a postemergence herbicide for selective control of broadleaf weeds, annual sedges, and yellow nutsedge in the following use sites:

- Established turfgrass
- Ornamentals
- Nurseries
- Noncropland sites, roadsides, and rights-of-way.

Refer to the Specific Use Site Information sections for specific application directions and restrictions and limitations for each use site.

Apply Bentazon 4 postemergence to actively growing weeds under good soil moisture conditions. If soil moisture is not adequate for active weed growth, irrigate before applying Bentazon 4. Weeds growing under drought conditions usually are not satisfactorily controlled.

Bentazon 4 does not control grass weeds. Bentazon 4 is effective mainly through contact activity; all target weeds must be thoroughly covered with spray.

Rainfall or overhead sprinkler irrigation within 8 hours after application may reduce the effectiveness of Bentazon 4.

## **Sprayer Equipment**

Apply Bentazon 4 with handheld pump-up and knap-sack sprayers, or hose-end type sprayers. Use standard high-pressure pesticide hollow-cone or flat-fan nozzles spaced 20-inches apart. DO NOT use flood, whirl chamber, or controlled droplet applicator (CDA) nozzles.

Apply Bentazon 4 with a minimum water volume of 1 gallon per 1000 sq ft (40 gallons/A) and a minimum spray pressure of 40 psi (measured at the boom not at the pump or in the line). When

foliage or weed population is dense, increase water volume to the equivalent of 2.5 gallons per 1000 sq ft and spray pressure to 80 psi.

Clean the sprayer thoroughly before applying Bentazon 4, particularly if the herbicide previously used has the potential to injure turfgrass or ornamentals.

## **Application Mixing Instructions**

Fill a thoroughly clean spray tank 1/2 to 2/3 full of clean water. Start agitation. Add Bentazon 4 and allow the components to mix thoroughly. Add oil concentrate and the remaining volume of water. Maintain constant agitation during application.

Mix only enough spray solution for one use. Use a fresh spray mixture each time.

## **Application Use Rates**

Apply Bentazon 4 at the use rates listed in Table 5 plus an oil-concentrate.

Table 5. Application Rates 1,2 for Bentazon 4

Spray Area	Benta Use Ra	Water as Spray Carrier (gals)	
	Low	High	
1000 sq ft	0.55	0.75	1 to 2
1 acre	12	16	40 to 80

<sup>&</sup>lt;sup>1</sup>Using these use rates to spot spray individual weeds may result in an excessive dosage and possible turfgrass or ornamental injury.

- In a single application, DO NOT exceed 0.75 fl oz of Bentazon 4 per 1000 sq ft. 16 fl ozs (1 pint) of Bentazon 4 contains 1.0 lb of bentazon (active ingredient).
- In a single application, DO NOT exceed 16 fl ozs (1 pint) of Bentazon 4 per acre.
- DO NOT exceed a total of 32 fl ozs (2 pints) of Bentazon 4 per acre per season.

#### **Addition of Oil Concentrate**

A nonphytotoxic oil concentrate must be added to the spray tank for optimum weed control. **DO NOT** apply oil concentrate in tank mix with Bentazon 4 over the top of ornamentals. The oil concentrate must contain either a petroleum-oil or vegetable-oil base [such as methylated seed oil (MSO) or crop oil concentrate (COC)] and must meet all the following criteria:

- Nonphytotoxic
- Contain only EPA-exempt ingredients
- Provide good mixing quality in the jar test (see following)
- · Successful in local experience

The exact composition of suitable products will vary; however, petroleum-oil or vegetable-oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils are more satisfactory than unrefined vegetable oils. To determine the suitability of oil concentrates with Bentazon 4, conduct the following jar test.

<sup>&</sup>lt;sup>2</sup>Application use rates depend on size of target weeds species; see Table 6 for Weeds Controlled.

## Jar Test to Estimate Oil Concentrate Suitability

Water Supply - Use only water from the intended source at the source temperature.

Water Spray Volume - For a spray volume of 1 gallon per 1000 sq ft, use 6-2/3 cups (1600 mL) of water. For other spray volumes, adjust proportionately.

**Herbicide and oil concentrate** - Add 2 teaspoons each of herbicide and oil concentrate for each 0.75 fl oz per 1000 sq ft of label rate.

Add components in the following sequence, gently mixing between additions:

- 1. Bentazon 4
- 2. Tank mix product; if used
- 3. Oil concentrate

Cap jar, invert 10 cycles, let stand for 15 minutes.

**Evaluate** - An ideal tank mix combination will be uniform. 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

#### Oil Concentrate Rate

Apply oil concentrate at 0.75 fl oz per 1000 sq ft (equivalent to 2 pints/A).

Adding oil concentrate to Bentazon 4 may cause a slight leaf burn on desired plants (turfgrass, ornamentals, etc.) when relative humidity and temperature are high. Refer to your Bentazon 4 supplier for information on successful local experience before purchasing oil concentrate.

**DO NOT** apply Bentazon 4 plus oil concentrate with pesticides whose labels caution against their use with oil adjuvants.

## **Application Restrictions and Limitations**

**DO NOT** exceed a total of 1 lb bentazon (active ingredient) per acre in a single application or 2 lbs bentazon (active ingredient) per acre per season.

**DO NOT** apply during windy conditions because spray drift may cause damage to adjacent ornamental plants.

Physical incompatibility, reduced weed control, or turfgrass and/or ornamental injury may result from mixing Bentazon 4 with pesticides (fungicides, herbicides, insecticides or miticides), additives or fertilizers.

#### **Weeds Controlled**

Apply Bentazon 4 early postemergence to actively growing weeds before they reach the maximum size listed in Table 6. Early application to newly emerged or small weeds will provide the most effective weed control. Delaying application will allow weeds to continue growth beyond the maximum size stated and will result in inadequate control. The exceptions are yellow nutsedge and Canada thistle. Special instructions for controlling these two weeds follows.

Table 6. Weeds Controlled

		Bentazon 4 Application Rate					
Common Name	Scientific Name	Leaf Stage			eaf Stage	Maximum Height (inches)	
Anoda, Spurred	Anoda caristata	Up to 6	3	6 to 8		4	
Balloonvine	Cardiospermum halicacabum	2 to 4	2	4 to 6		3	
Buckwheat, wild	Polygonum convolvulus	Up to 4	3	4 to 6		5	
Coffee Senna	Cassia occidentalis	NR	-	Up to	1 pinnate*	2	
Dayflower	Commelina spp.	Up to 6	4	6 to 1	0	8	
Devil's claw	Probiscidea louisiana	NR	-	Up to	6*	3	
Galinsoga	Galinsoga spp.	NR	-	Cotyledon to 6* 2		2	
Groundsel, common	Senecio vulgaris	NR	- SOUTH	2 to 10 6		6	
Ladysthumb	Polygonum persicaria	Up to 6	6	6 to 10		1	
Lambsquarters <sup>1</sup> , common	Chenopodium album	NR	- X 5 A 7 A	4 to 8*		2	
Mallow, Venice	Hibiscus trionum	Up to 6	2	6 to 10		4	
Mustard, wild	Sinapsis arvensis	Up to 6	4	6 to 10		8	
Nutsedge, yellow	Cyperus esculentus	See Special Directions for Problem We			Weeds		
Poinsetta, wild	Euphorbia heterophylla	2-4	4	4 to 8	*	6	
Prickly sida/Teaweed	Sida spinosa	Up to 6	3	6 to 8		4	
Purslane, common	Portulaca oleracea	Up to 4	1	4 to 6		2	
Ragweed, common	Ambrosia artemisiifolia	NR	-	4 to 6	*	3	
Ragweed, Giant <sup>2</sup>	Ambrosia trifida	NR	-	Up to	4	6	
Redweed	Melochia corchorifolia	4-6	6	6 to 1	0	8	
Sedge, Annual	Cyperus compressus	NR	6 to 8	NR		6 to 8	
Sesbania	Sesbania exaltata	NR	-	3 to 5	*	3	
Shepherd's purse <sup>3</sup>	Capsella bursa-pastoris	Up to 6	4	6 to 1	0	8	
Smartweed, Pennsylvania	Polygonum pennsylvanicum	Up to 6	6	6 to 1	0	1	
Spurweed/ Lawn burrweed	Soliva pterosperma	NR	- 100	2 to 6		3	
Sunflower, wild	Helianthus annuus	Up to 4	5	4 to 6		8	
Thistle, Canada	Cirsium arvense					1	
Thistle, musk	Carduus nutans	See Sp	ecial Dire	See Special Directions for Problem Wee			

Control may be partial or inconsistent

<sup>&</sup>lt;sup>2</sup> If a second weed flush develops after the first application, re-treat according to this rate table.

DO NOT treat rosette before seed stalk appears

<sup>\*</sup> Requires addition of oil concentrate at 0.75 fl oz/1000 sq ft (2 pts/A)

NR = Not recommended for use

## **Special Directions for Weed Problems**

#### **Canada Thistle**

Apply 0.75 fl oz of Bentazon 4 per 1,000 sq ft (16 fl oz/A) when Canada thistle is from 8 inches tall to the bud stage. If desired control is not obtained with the first application, make a second application at the same rate 7-10 days later or when new growth appears.

#### **Musk Thistle**

Apply 0.75 fl oz of Bentazon 4 T/O per 1,000 sq ft (16 fl oz/A) when musk thistle is in the rosette stage no larger than 10 inches in diameter. If desired control is not obtained with the first application, make a second application at the same rate 7 to 10 days later or when new growth appears.

## **Yellow Nutsedge**

Make two applications of Bentazon 4 for best control of yellow nutsedge. Apply 0.55-0.75 fl oz of Bentazon 4 per 1,000 sq ft (12 to 16 fl oz/A) when yellow nutsedge is 6 inches to 8 inches tall. Make a second application at the same rate 7-10 days later or when new growth appears later in the season. Thorough spray coverage of yellow nutsedge is essential for maximum control.

Yellow nutsedge emerges May through July in the northern United States, but it emerges throughout the year in the southern United States. Plan initial applications when yellow nutsedge has emerged because Bentazon 4 will only control nutsedge plants that have emerged.

## Specific Use Site Information

### **Established Turfgrass**

**Bentazon 4** may be applied to established turfgrass growing in areas such as athletic fields, commercial or residential settings, golf courses, recreational areas, sod farms, or any other maintained area of established turfgrass.

**Bentazon 4** may be used on the following established turfgrass species: bluegrass, fescue, bentgrass, Bermudagrass, Bahiagrass, centipedegrass, zoysiagrass, ryegrass, St. Augustinegrass, carpetgrass, and buffalograss.

Bentazon 4 will control annual sedges, common groundsel, common purslane, dayflower, wild mustard, and yellow nutsedge in established turfgrass. See Table 6 for other weeds controlled.

### **Turf Restrictions and Limitations**

- DO NOT apply Bentazon 4 to turfgrass that has been under stress such as drought, cold temperature, or injury from other herbicides or pesticides.
- DO NOT apply Bentazon 4 to any newly seeded or newly sprigged turfgrass until seedlings or sprigs are well established or injury may result.
- DO NOT use on golf course greens or collars.
- In perennial ryegrass, apply no more than 0.75 fl oz of Bentazon 4 per 1000 sq ft (16 fl ozs/A) in a single application and make subsequent applications no less than 21 days later.

- In unmowed established turfgrass, make the first application of Bentazon 4 after emergence but before annual sedge, Canada thistle, and yellow nutsedge, are 8-inches tall. Annual broadleaf weeds should be no taller than 4 inches.
- For best control of broadleaf weeds, DO NOT mow turfgrass within 3 days before or after application.
- For best control of sedges, DO NOT mow turfgrass within 5 days of application.
- When treating turfgrass with Bentazon 4, avoid over-the-top spraying of adjacent ornamental trees, shrubs, and flowers unless otherwise specified in this label. Spraying near the base of established ornamental trees, shrubs, and flowers should not result in injury except for sycamore and rhododendron.

## Tank Mixes on Established Turfgrass

For postemergence control of other broadleaf weeds or sedges not listed on this label, tank mix Bentazon 4 with other products registered for use in turfgrass such as Image 70 DG herbicide, Turflon herbicide, 2,4-D, atrazine, MSMA, and mixes of 2,4-D, MCPP (mecoprop) or 2,4-DP (dichlorprop). Some of these products cannot be used on all turfgrass sites or species. Refer to the respective product labels for site and species restrictions. A tank mix with Segment herbicide may be used on centipedegrass and fine fescue species.

Determine the compatibility of the potential tank mix product before mixing with Bentazon 4 in the spray tank. An anti-foaming agent may be used if needed. DO NOT use a surfactant or oil additive with 2,4-D; MCPP; or 2,4-DP.

Read each tank mix product label for Directions For Use, Precautionary Statements, and Restrictions and Limitations. The most restrictive labeling applies in all tank mixes.

Consult local professional authorities when using tank mix combinations other than those specified by RedEagle International. Otherwise, test a small area of the site with the desired tank mix combination and allow 7 to 10 days to evaluate the potential for injury.

## Ornamentals, Nursery, Noncropland Sites, Roadsides, and Rights-of-way

Bentazon 4 may be applied over the top of certain ornamental species listed in Table 3. **DO NOT** apply oil concentrate in tank mix with Bentazon 4 over the top of ornamentals. Because of the variability within species, in application technique and manner of use, it has not been fully determined if Bentazon 4 can be safely used on all ornamentals or nursery plants under all growing conditions. Therefore, the user should apply to a few plants to determine if Bentazon 4 can be safely used for broadscale application.

For all other landscape and ornamental trees, shrubs, flowers, and nursery plants not listed in Table 7, apply Bentazon 4 as a directed spray away from the foliage of desired plants. **DO NOT** apply Bentazon 4 as a directed spray under the tree line or over the roots of sycamore and rhododendron or injury may occur. **DO NOT** apply if the risk of injury to these plants is not acceptable.

Bentazon 4 may be used in sites where grass vegetation must be maintained.

Table 7. Ornamental Species for Over-the-top Applications

	Species for Over-the-
Common Name	Scientific Name
Alumroot	Heuchera spp.
Apple (nonbearing)	Malus spp.
Arborvitae*	Thuja occidentalis
Barberry, Japanese	Berberis thunbergii
Boxwood	Buxus spp.
Bugle, common	Ajuga spp.
Butterfly bush	Buddleia davidii
Cabbage ornamental	Brassica spp.
Cape jasmine	Gardenia spp.
Chokeberry	Photinia spp.
Coral bells	Heuchera spp.
Cotoneaster	Cotoneaster spp.
Crabapple (nonbearing)	Malus spp.
Crape myrtle	Lagerstroemia indica
Cypress, bald	Taxodium distichum
Daylily	Hemerocallis spp.
Dusty miller	Centaurea cineraria
Euonymus	Euonymus spp.
Gardenia, common	Gardenia spp.
Golden-rain tree	Koelreuteria bipinnata
Hawthorn, Indian	Raphiolepis indica
Holly	llex spp.
Holly, Chinese	llex comuta
Holly, dwarf Chinese	llex comuta
Holly, Japanese	llex crenata
Hydrangea	Hydrangea spp.
Jasmine	Jasminum spp.
Lily, plantain	Hosta fortunei
Lilyturf	Liriope spp.
Lilyturf, big blue	Liriope muscari
Liriope, creeping	Liriope spicata
Marigold	Tagetes spp.
Myrtle, wax	Myrica cerifera
Oak, red*	Quercus rubra
Pachysandra	Pachysandra terminalis
Petunia	Petunia hybrida
Photinia	Photinia spp.
Pine, Mugo	Pinus mugo
Pine, white	Pinus strobus
Pittosporum, Japanese	Pittosporum tobira
Snapdragon	Antimhinum majus
Yew	Taxus spp.
	The second secon

Common Name	Scientific Name		
Yew hybrids	Taxus x media		
Yew, Japanese	Taxus cuspidata		
Yew, Southern	Podocarpus		

<sup>\*</sup> Make no more than one application per crop per growing season. Some species within genera may vary in degree of tolerance. Prior to application across a large number of plants within the same species, test Bentazon 4 on a small number of plants of that species and observe for 2 weeks. **DO NOT** apply crop oil with applications of Bentazon 4 over the top to ornamentals or injury may occur.

## **Ornamentals and Nursery Restrictions and Limitations**

**DO NOT** apply Bentazon 4 to ornamental or nursery plants that have been subject to stress conditions such as hail damage, flooding, drought, extreme heat, or widely fluctuating temperatures or crop injury may result.

**DO NOT** apply Bentazon 4 if ornamental or nursery plants show injury (leaf phytotoxicity or plant stunting) produced by prior herbicide applications because this injury may be enhanced or prolonged.

#### **Ornamental Tank Mixes**

Tank Mix of Bentazon 4 + Tower herbicide. Apply a tank mix of Bentazon 4 plus Tower as a post-emergence directed spray to control yellow nutsedge and certain emerged broadleaf weeds listed on the Bentazon 4 label. This tank mix will also control certain broadleaf and grass weeds listed on the Tower label that have not emerged. Apply this tank mix as a directed spray away from the foliage of ornamental plants. If any desirable plant foliage receives direct or indirect application, wash the solution off the foliage immediately. Read each tank mix product label for Directions For Use, Precautionary Statements, and Restrictions and Limitations. The most restrictive labeling applies in all tank mixes.

Tank Mix of Bentazon 4 + Segment herbicide. A tank mix of Bentazon 4 plus Segment may be applied to control yellow nutsedge, certain broadleaf weeds,-and annual and perennial grass weeds. This tank mix will not control weeds and grasses that have not emerged. Apply as a directed spray away from the foliage of ornamental plants. If any desirable plant foliage receives direct or indirect application, wash the solution off the foliage immediately. Read each tank mix product label for Directions For Use, Precautionary Statements, and Restrictions and Limitations. The most restrictive labeling applies in all tank mixes.

Other Tank Mixes. Bentazon 4 may be tank mixed with other compatible products registered for use in ornamentals. Apply tank mixes of Bentazon 4 and other products as a directed spray away from the foliage of ornamental plants. If any desirable plant foliage receives direct or indirect application, wash the solution off the foliage immediately.

When applying tank mixes not specified on this label, test the application on a small area to determine the safety of the anticipated tank mix. Evaluate the potential for injury 5 to 7 days later, before making a general application of this tank mix.

Read each tank mix product label for Directions For Use, Precautionary Statements, and Restrictions and Limitations. The most restrictive labeling applies in all tank mixes.

## **DIRECTIONS FOR USE [Turf and Ornamental – Homeowner]**

The following Directions For Use are applicable for homeowner use of Bentazon 4 in established turfgrass and ornamentals. Read the entire label for Directions For Use and Precautionary Statements.

## **Use Information**

Bentazon 4 is a post emergence herbicide for selective control of broadleaf weeds, annual sedges, and yellow nutsedge in the following use sites:

- · Established turfgrass
- Ornamentals

Bentazon 4 does not control grasses. Bentazon 4 is effective mainly through contact activity; therefore, all target weeds must be thoroughly covered with spray. Large weed leaf canopies shelter smaller weeds and prevent adequate spray coverage.

## **Application Information**

## **Sprayer Equipment**

Apply Bentazon 4 with handheld pump-up and knapsack sprayers, or hose-end type sprayers. Clean the sprayer thoroughly before applying Bentazon 4, particularly if the herbicide previously used has the potential to injure turfgrass or ornamentals.

Apply Bentazon 4 with a minimum water volume of 1 gallon per 1000 sq ft and a minimum spray pressure of 40 psi (measured at the boom, not at the pump or in the line).

## **Application Mixing Instructions**

Fill a thoroughly clean spray tank  $\frac{1}{2}$  to  $\frac{2}{3}$  full of clean water. Add Bentazon 4 and shake or stir the spray solution to mix thoroughly. Add the remaining volume of water and shake or stir the spray solution to mix thoroughly. Mix only enough spray solution for one use. Use a fresh spray mixture for each application.

#### **Addition of Oil Concentrate**

A nonphytotoxic oil concentrate must be added to the spray tank for optimum weed control. **DO NOT** apply oil concentrate in tank mix with Bentazon 4 over the top of ornamentals. The oil concentrate must contain either a petroleum-oil or vegetable-oil base and must meet all the following criteria:

- Nonphytotoxic
- · Contain only EPA-exempt ingredients
- Provide good mixing quality in the jar test (see following)
- · Successful in local experience

The exact composition of suitable products will vary; however, petroleum-oil or vegetable-oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils are more satisfactory than unrefined vegetable oils.

## **Application Mixing Instructions with Oil Concentrate**

Fill a thoroughly clean spray tank ½ to 2/3 full with clean water. Add Bentazon 4 and shake or stir the spray solution so Bentazon 4 and water mix thoroughly. Add the oil concentrate and the remaining volume of water. Again, shake or stir the spray solution so the Bentazon 4, oil concentrate and water mix thoroughly. Mix only enough spray solution for one use; use a fresh spray mixture for each application.

#### Oil Concentrate Rate

For 1.0 to 2.0 gallons of water volume per 1000 sq ft, use 0.75 fl oz (5 teaspoons) of oil concentrate or a proportionate amount for other-sized areas.

Adding oil concentrate to Bentazon 4 may cause a slight leaf burn on desired plants (turfgrass, ornamentals) when relative humidity and temperature are high. Refer to your Bentazon 4 supplier for information on successful local experience before purchasing oil concentrate.

DO NOT apply Bentazon 4 plus oil concentrate with pesticides whose labels caution against their use with oil adjuvants.

## **Application Restrictions and Limitations**

**DO NOT** exceed a total of 1 lb active ingredient (bentazon) per acre in a single application or 2 lbs active ingredient (bentazon) per acre per season.

DO NOT apply more than a total of 1.5 fl oz of Bentazon 4 per 1000 sq ft per calendar year.

Rainfall or sprinkler irrigation within 8 hours after application may nullify the effectiveness of Bentazon 4.

**DO NOT** apply during windy conditions because spray drift may cause damage to adjacent desired ornamental plants.

**DO NOT** apply Bentazon 4 during prolonged periods of drought or during unseasonably cold weather because unsatisfactory weed control may result.

DO NOT cultivate or mow within five days before or after Bentazon 4 application.

#### **Weeds Controlled**

Apply Bentazon 4 early postemergence to small, actively growing weeds before they reach the maximum size listed in Table 8. Early application to newly emerged or small weeds will provide the most effective weed control. Delaying application will allow continuing growth beyond the maximum size stated and will result in adequate control.

**Table 8. Weeds Controlled** 

		Bentazon 4 Application Rate				
		0.55 fl oz (12 fl oz//	/1,000 sq ft A)	0.75 fl oz/1,0 (16 fl oz/A)	fl oz/1,000 sq ft oz/A)	
Common Name	Scientific Name	Weed Growth Stage				
		Leaf Stage	Maximum Height (inches)	Leaf Stage	Maximum Height (inches)	
Anoda, Spurred	Anoda caristata	Up to 6	3	6 to 8	4	
Balloonvine	Cardiospermum halicacabum	2 to 4	2	4 to 6	3	
Beggarticks	Bidens frondosa	Up to 6	6	6 to 8	8	
Bristly starbur	Acanthospermum hispidum	NR		4 to 6	3	
Buckwheat, wild	Polygonum convolvulus	Up to 4	3	4 to 6	5	
Cocklebur	Xanthium strumarium	2 to 6*	6	6 to 10	10	
Coffee Senna	Cassia occidentalis	NR	-	Up to 1 pinnate	2	
Dayflower	Commelina spp.	Up to 6	4	6 to 10	8	
Devil's claw	Probiscidea louisiana	NR	-	Up to 6*	3	
Galinsoga	Galinsoga spp.	NR	-	Cotyledon to 6*	2	
Groundsel, common	Senecio vulgaris	NR	-	2 to 10	6	
Jimsonweed	Datura stramonium	Up to 6	6	6 to 10	10	
Ladysthumb	Polygonum persicaria	Up to 6	6	6 to 10	1	
Mallow, Venice	Hibiscus trionum	Up to 6	2	6 to 10	4	
Mustard, wild	Sinapsis arvensis	Up to 6	4	6 to 10	8	
Nutsedge, yellow	Cyperus esculentus	See Spe	cial Direct	ions for Problem	n Weeds	
Poinsetta, wild	Euphorbia heterophylla	2-4	4	4 to 8*	6	
Prickly sida/Teaweed	Sida spinosa	Up to 6	3	6 to 8	4	
Purslane, common	Portulaca oleracea	Up to 4	1	4 to 6	2	
Ragweed, common	Ambrosia artemisiifolia	NR	-	4 to 6*	3	
Ragweed, Giant	Ambrosia trifida	NR	-	Up to 4	6	
Redweed	Melochia corchorifolia	4-6	6	6 to 10	8	
Sedge, Annual	Cyperus compressus	NR	6 to 8	NR	6 to 8	
Sesbania	Sesbania exaltata	NR	-	3 to 5*	3	
Shepherd's purse <sup>1</sup>	Capsella bursa-pastoris	Up to 6	4	6 to 10	8	
Smartweed, Pennsylvania	Polygonum pennsylvanicum	Up to 6	6	6 to 10	1	
Spurweed/ Lawn burrweed	Soliva pterosperma			2 to 6	3	
Sunflower, wild	Helianthus annuus	Up to 4	5	4 to 6	8	
Thistle, Canada	Cirsium arvense	0 0	alal Dime	ione for Durki	- 14/	
Thistle, musk	Carduus nutans	See Spe	ciai Direct	ions for Problem	n Weeds	
Velvetleaf	Abutilon theophrasti	Up to 4	2	4 to 6	5	

DO NOT treat earlier than leaf stage shown. DO NOT count cotyledon leaves.
 DO NOT treat rosette before seed stalk appears

NR = Not recommended for use

## **Special Directions for Problem Weeds**

#### Canada thistle

Apply 0.75 fl oz of Bentazon 4 per 1000 sq ft when Canada thistle is from 8-inches tall to the bud stage. If desired control is not obtained with the first application, make a second application at the same rate 7 to 10 days later or when new growth appears.

#### Musk thistle

Apply 0.75 fl oz of Bentazon 4 per 1000 sq ft when Musk thistle is in the rosette stage no larger than 10 inches in diameter. If desired control is not obtained with the first application, make a second application at the same rate 7 to 10 days later or when new growth appears.

## **Specific Use Site Information**

#### **Established Turfgrass**

Bentazon 4 may be used on established bluegrass, fescue, bentgrass, Bermudagrass, Bahiagrass, centipedegrass, zoysiagrass, ryegrass, and St. Augustinegrass.

Bentazon 4 will control yellow nutsedge in established turfgrass. Refer to Table 9 for water volumes and Bentazon 4 use rates.

To control yellow nutsedge, apply no more than 0.75 fl oz of Bentazon 4 per 1000 square feet in a single application when plants are 6 to 8 inches tall. If desired control is not obtained, make a second application at the same rate 7 to 10 days later or when new growth appears. Apply no more than 1.5 fl oz of Bentazon 4 per 1000 square feet per calendar year.

In unmowed turfgrass, make the first application of Bentazon 4 after emergence but before yellow nutsedge is 8 inches tall. Thorough spray coverage of yellow nutsedge is essential for maximum control. For best control, DO NOT mow turfgrass within 3 days before or after application.

Yellow nutsedge emerges May through July in the northern United States, but it emerges throughout the year in the southern United States. Plan initial applications when yellow nutsedge has emerged because Bentazon 4 will only control nutsedge plants that have emerged.

Table 9. Application Rate for Established Turfgrass

Spray Area (sq ft)	Bentazon 4 (fl oz)	Water <sup>1</sup> as Spray Carrier (gallons)
200	0.15 (1 teaspoon)	0.2 to 0.4 (1.6 to 3.2 pints)
400	0.3 (2 teaspoons)	0.4 to 0.8 (3.2 to 6.4 pints)
1000	0.75 (5 teaspoons)	1 to 2

<sup>1</sup>Quantity of water required to uniformly spray this area with your sprayer. Use a minimum water volume of 1 gallon per 1000 sq ft with a minimum pressure measured at the nozzle of 40 psi.

Weeds also controlled by Bentazon 4 in turfgrass are: annual sedges, beggarticks, Canada thistle, chickweed, cocklebur, common groundsel, common purslane, galinsoga, jimsonweed, ladysthumb, lambsquarters, musk thistle, shepherd's purse, smartweed, spurweed, velvetleaf, Venice mallow, wild buckwheat, wild mustard, and wild poinsettia. These weeds are not registered for control in California.

In unmowed turfgrass, make the first application of Bentazon 4 after emergence but before annual sedge and Canada thistle are 8-inches tall, and other annual broadleaf weeds are 4 inches tall. For best sedge control, DO NOT mow within 5 days of application.

Weeds suppressed by Bentazon 4 in turfgrass include: common ragweed, giant ragweed, morningglory, and wild sunflower. These weeds are not registered for suppression in California.

Weeds not controlled by Bentazon 4 include: purple nutsedge, pigweed, plantain, dandelion, onion/garlic, wood sorrel, and spurge.

## **Turfgrass Restrictions and Limitations**

In California, Bentazon 4 is registered for use only in established turfgrass to control yellow nutsedge.

DO NOT apply Bentazon 4 to turfgrass that has been under stress such as drought, cold temperature, or injury from other herbicides.

DO NOT apply Bentazon 4 to any newly seeded or newly sprigged turfgrass until seedlings or sprigs are well established or injury may result.

DO NOT apply Bentazon 4 to golf course greens or collars.

In perennial ryegrass, apply no more than 0.75 fl oz of Bentazon 4 per 1000 square feet at one time. Make a second application no less than 21 days later.

When treating turfgrass with Bentazon 4, avoid over the top spraying of adjacent ornamental trees, shrubs, and flowers unless otherwise specified in this label.

## **Ornamentals**

Bentazon 4 is not allowed for use on ornamentals in California.

Apply Bentazon 4 at the rates listed in Table 8 when weeds are actively growing and before they reach the maximum size.

Bentazon 4 may be applied over the top of certain ornamental species listed in Table 10. DO NOT apply oil concentrate in tank mix with Bentazon 4 over the top of ornamentals. Because of the variability within species, in application technique, and manner of use, it has not been fully determined if Bentazon 4 can be safely used on all ornamental plants under all growing conditions. Therefore, the user should apply to a few plants to determine if Bentazon 4 can be safely used for broad-scale application. Some leaf speckling and leaf bronzing may occur under certain conditions.

For all other landscape and ornamental trees, shrubs, flowers, and nursery plants not listed in Table 3, apply Bentazon 4 as a directed spray away from the foliage of desired plants. DO NOT apply Bentazon 4 as a directed spray under the tree line or over the roots of sycamore and rhododendron or injury may occur. DO NOT apply if the risk of injury to these plants is not acceptable.

Table 10. Ornamental Species for Over-the-top Applications

Table 10. Ornamental Species for Over-the	
Common Name	Scientific Name
Alumroot	Heuchera spp.
Apple (nonbearing)	Malus spp.
Arborvitae*	Thuja occidentalis
Barberry, Japanese	Berberis thunbergii
Boxwood	Buxus spp.
Bugle, common	Ajuga spp.
Butterfly bush	Buddleia davidii
Cabbage ornamental	Brassica spp.
Cape jasmine	Gardenia spp.
Chokeberry	Photinia spp.
Coral bells	Heuchera spp.
Cotoneaster	Cotoneaster spp.
Crabapple (nonbearing)	Malus spp.
Crape myrtle	Lagerstroemia indica
Cypress, bald	Taxodium distichum
Daylily	Hemerocallis spp.
Dusty miller	Centaurea cineraria
Euonymus	Euonymus spp.
Gardenia, common	Gardenia spp.
Golden-rain tree	Koelreuteria bipinnata
Hawthorn, Indian	Raphiolepis indica
Holly	llex spp.
Holly, Chinese	llex comuta
Holly, dwarf Chinese	llex comuta
Holly, Japanese	llex crenata
Hydrangea	Hydrangea spp.
Jasmine	Jasminum spp.
Lily, plantain	Hosta fortunei
Lilyturf	Liriope spp.
Lilyturf, big blue	Liriope muscari
Liriope, creeping	Liriope spicata
Marigold	Tagetes spp.
Myrtle, wax	Myrica cerifera
Oak, red*	Quercus rubra
Pachysandra	Pachysandra terminalis
Petunia	Petunia hybrida
Photinia	Photinia spp.
Pine, Mugo	Pinus mugo
	Pinus strobus
Pine, white	
Pittosporum, Japanese	Pittosporum tobira
Snapdragon	Antimhinum majus
Yew	Taxus spp.

Table 10. (continued)	
Common Name	Scientific Name
Yew hybrids	Taxus x media
Yew, Japanese	Taxus cuspidata
Yew, Southern	Podocarpus

<sup>\*</sup> Make no more than one application per crop per growing season. Some species within genera may vary in degree of tolerance. Prior to application across a large number of plants within the same species, test Bentazon 4 on a small number of plants of that species and observe for 2 weeks. **DO NOT** apply crop oil with applications of Bentazon 4 over the top to ornamentals or injury may occur.

#### **Ornamental Restrictions and Limitations**

**DO NOT** apply Bentazon 4 to desirable plants that have been subject to stress conditions such as hail damage, flooding, drought, extreme heat, or widely fluctuating temperatures or crop injury may result.

**DO NOT** apply Bentazon 4 if desirable plants show injury (leaf phytotoxicity or plant stunting) produced by prior herbicide applications because this injury may be enhanced or prolonged.

# STORAGE AND DISPOSAL [Agricultural and Turf and Ornamental (Commercial)] DO NOT contaminate water, food, or feed by storage or disposal.

## **Pesticide Storage**

DO NOT store at less than 32° F and DO NOT allow product to freeze.

## Pesticide Disposal

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

#### CONTAINER DISPOSAL

**Nonrefillable Container. DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity < 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or

disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

## Storage and Disposal [Homeowner use ]

DO NOT contaminate water, food, or feed by storage or disposal.

**Pesticide Storage**: Keep pesticide in original container. DO NOT put concentrate or dilute spray into food, feed, or drink containers. Avoid contamination of feed and foodstuffs. Store in a cool, dry place, preferably in a locked storage area. DO NOT store diluted spray.

## Pesticide Disposal and Container Handling

Nonrefillable container. DO NOT reuse or refill this container.

If empty: Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

# IMPORTANT INFORMATION READ BEFORE USING PRODUCT

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

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

The Directions for Use of this product must be followed carefully. The Directions for Use of this product reflect the opinion of experts based on field use and tests. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of RedEagle International LLC or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of RedEagle International LLC and Seller. To the fullest extent allowed by State law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold RedEagle International LLC and Seller harmless for any claims relating to such factors.

RedEagle International LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or RedEagle International LLC, and Buyer and User assume the risk of any such use. REDEAGLE INTERNATIONAL LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS

FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent allowed by law, RedEagle International LLC or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF REDEAGLE INTERNATIONAL LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE, AT THE ELECTION OF REDEAGLE INTERNATIONAL LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT, OR COMPENSATION LIMITED TO DAMAGES NOT EXCEEDING THE FAIR MARKET PURCHASE PRICE, AND SHALL NOT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES.

RedEagle International LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of RedEagle International LLC.

- Clarity, Distinct, Facet, Image, Lightning, Marksman, Outlook, Paramount, Poast, Segment, Tower, Poast Plus, Pursuit, Raptor, and Scepter are registered trademarks of BASF.
- Flexstar, Reflex, and are registered trademarks of a Syngenta Group Company.
- Buctril and Liberty are registered trademarks of Bayer Crop Science.
- Classic and SynchronySTS are registered trademarks of E.I. du Pont de Nemours and Co.
- Cobra and Resource are registered trademarks of Valent USA Corp.
- FirstRate, Lorsban, Turflon, and Stinger are registered trademarks of Dow Agrosciences LLC.
- Furadan and Pounce are registered trademarks of the FMC Corporation.
- RoundUp Ultra and RoundUp Ready are registered trademarks of Monsanto.
- Acifluorfen 2 is registered by RedEagle International LLC.
- Londax and Storm are registered trademarks of United Phosphorus, Inc.
- Sinbar is a registered trademark of Tessenderlo Kerley, Inc.