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Systems Integration Group, Inc.

PM 25

"NOTIFICATION" 7969-88

2/19/99

P7/1/29

Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0060.



United States  
Environmental Protection Agency  
Washington, DC 20460

☐ Registration  
☐ Amendment  
☒ Other

OPP Identifier Number

6219

## Application for Pesticide - Section I

1. Company/Product Number 7969-88	2. EPA Product Manager JAMES TOMPKINS	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) VANTAGE <sup>®</sup> HERBICIDE	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) BASF CORPORATION AGRICULTURAL PRODUCTS P.O. BOX 13528 RESEARCH TRIANGLE PARK, NC <input type="checkbox"/> Check if this is a new address 27709-3528		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____

## Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

**NOTIFICATION**  
FEB 19 1999

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

ELIMINATION OF REDUNDANT TEXT ON pp 12-24. (COMMON & SCIENTIFIC NAMES ARE LISTED TWICE. ELIMINATION OF ONE SET OF THESE NAMES ALLOWS FOR A MORE REASONABLE LENGTH PACKAGE LABEL.

## Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____	
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

## Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name DALE R. CARLSON	Title REGISTRATION SCIENTIST	Telephone No. (Include Area Code) (919) 547-2831
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature <i>Dale R. Carlson</i>	3. Title Registration Scientist	
4. Typed Name Dale R. Carlson	5. Date 2/12/99	

# BASF

2/29

HIGHLIGHTED CHANGES

PP 12-24

## Vantage<sup>®</sup>

herbicide

### Postemergence Grass Herbicide

**Active Ingredient:**

Sethoxydim: 2-[1-(ethoxyimino)butyl-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one\* ..... 13.0%

**Inert Ingredients:** ..... 87.0%

**Total** ..... 100.0%

\*Equivalent to 1 pound of sethoxydim per gallon

EPA Reg. No. 7969-88

EPA Est. No. 34313-TX-01

**KEEP OUT OF REACH OF CHILDREN.**

### CAUTION

**NOTIFICATION**

**FEB 19 1999**

**Statement of Practical Treatment**

**If in eyes:** Flush with plenty of water. Call a physician if irritation persists.

**If on skin:** Wash with plenty of soap and water. Get medical attention.

**If swallowed:** Promptly drink a large quantity of milk, egg whites, gelatin solution, or, if these are not available, large quantities of water. Avoid alcohol.

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the **Directions For Use** for information about this standard.

**Net contents: 1 pint**

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

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### Precautionary Statements HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

Causes moderate eye injury.  
Harmful if swallowed or absorbed  
through skin. Avoid contact with  
skin, eyes, or clothing.

### Personal Protective Equipment:

Some materials that are chemical-  
resistant to this product are listed  
below. If you want more options,  
follow the instructions for category  
**E** on an EPA chemical resistance  
category selection chart.

### Applicators and Other Handlers Must Wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such  
as barrier laminate, nitrile rubber  $\geq$  14  
mils, neoprene rubber  $\geq$  14  
mils, or viton  $\geq$  14 mils
- Shoes plus socks

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

### Engineering Controls Statement

When handlers use closed systems,  
enclosed cabs, or aircraft in a man-  
ner that meets the requirements  
listed in the Worker Protection  
Standard (WPS) for agricultural pes-  
ticides [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, drink-  
ing, 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 remov-  
ing. 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 inter-  
tidal areas below the mean high  
water mark. Do not contaminate  
water when disposing of equipment  
washwaters.

### Endangered Species Concerns

The use of any pesticide in a man-  
ner that may kill or otherwise harm  
an endangered species or adversely  
modify their habitat is a violation of  
federal law.

### Directions For Use

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

For any requirements specific to  
your state or tribe, consult the  
agency responsible for pesticide  
regulation.

### Agricultural Use Requirements

Use this product only in accor-  
dance with its labeling and with the  
Worker Protection Standard, 40  
CFR part 170. This standard con-  
tains requirements for the protec-  
tion of agricultural workers on  
farms, forests, nurseries, and  
greenhouses, and handlers of agri-  
cultural pesticides. It contains  
requirements for training, deconta-  
mination, notification, and emer-  
gency assistance. It also contains  
specific instructions and exceptions  
pertaining to the statements on this  
label about personal protective  
equipment (PPE), and restricted-  
entry interval. The requirements in  
this box only apply to uses of this  
product that are covered by the  
Worker Protection Standard.

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

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.

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 treat-  
ed, such as plants, soil, or water,  
is:

- Coveralls
- Chemical-resistant gloves such as  
barrier laminate, nitrile rubber  $\geq$  14  
mils, neoprene rubber  $\geq$  14 mils,  
or viton  $\geq$  14 mils
- Shoes plus socks

### 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 greenhous-  
es. Do not allow people or pets to  
come into contact with treated  
areas until sprays have dried.

### Storage and Disposal

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

Pesticide wastes are toxic.  
Improper disposal of excess pesti-  
cide, spray mix, or rinsate is a viola-  
tion of federal law. If these wastes  
cannot be disposed of according to  
the label instructions, contact your  
State Pesticide or Environmental  
Control Agency, or the Hazardous  
Waste representative at the nearest  
EPA Regional Office for guidance.  
Triple rinse container (or equivalent).  
Then offer for recycling or recondi-  
tioning, or puncture and dispose of  
in a sanitary landfill or by incinera-  
tion, or, if allowed by state and local  
authorities, by burning.  
If burned, stay out of smoke.

### In Case of Emergency

In case of large-scale spillage  
regarding this product call:  
CHEMTREC 800-424-9300  
BASF Corporation 800-832-HELP

In case of medical emergency  
regarding this product, call:  
1. Your local doctor for immediate  
treatment.  
2. Your local poison control center  
(hospital).  
3. BASF Corporation 800-832-HELP

**Vantage<sup>®</sup> herbicide** is a selective  
broad spectrum postemergence  
herbicide used to control annual  
and perennial grassy weeds in turf,  
ornamentals, nonfood, and noncrop  
sites listed on this label. **Vantage**  
does not control sedges (annual or  
perennial), annual bluegrass, or  
broadleaf weeds. Because many  
grasses such as sorghum, corn,  
small grains, and rice as well as  
many other ornamental turf grasses  
(except fine fescue and centipede-  
grass) are susceptible to **Vantage**,  
avoid all direct or indirect contact  
with any desirable grass species.  
Avoid any spray drift.

**Vantage® herbicide** may be used in or around the following sites. Consult the appropriate section of this label for **Directions For Use** and **Restriction and Limitations** before using this product.

- Centipedegrass and fine fescue turf
- Fine fescue seed production
- Bedding plants
- Drug and medicinal crops
- Fences and hedgerows
- Public buildings
- Recreation areas
- Storage yards
- Electrical transformer stations
- Sewage disposal areas
- Uncultivated agricultural areas
- Perennial peanuts (nonfood)
- Trees, Christmas trees
- Shrubs
- Ground covers
- Rights-of-ways
- Roadsides
- Other paved areas
- Industrial sites
- Airports
- Pipeline pumping stations
- Potting and top soils
- General indoor/outdoor sites
- Wildflowers

#### Control Symptoms

**Vantage** rapidly enters grass plants through the foliage and translocates throughout the plant. Control symptoms exhibited by the grass plant progress from a slowing or stopping of growth (generally within 2 days), to reddening of the foliage and to leaf tip burn. Subsequently, foliage burnback occurs. This will generally be observed within 3 weeks depending on environmental conditions.

#### Notice to User

Due to variability within species and in application techniques, neither the manufacturer nor the seller has determined whether or not **Vantage** can safely be used on all varieties and species of nonbearing food crops, trees, shrubs, ornamentals, bedding plants, ground covers, nursery plantings, wildflowers, Christmas trees, turf and other nonfood crops under all conditions. It is recommended, therefore, that the professional user determine if **Vantage** can be used safely before broad use by applying the recommended use rate of **Vantage** on a nonlabeled species or variety under the conditions expected to be encountered on a small test area. Any adverse effects should be visible within 7 days.

#### Application Information

Apply **Vantage** to actively growing grasses at the proper growth stage as specified in this labeling. In irrigated areas, it may be necessary to irrigate before treating with

**Vantage** to ensure active weed growth. Grass weeds that have been mowed or have regrown from mowed stubble may be controlled poorly. Repeat application if new germination or regrowth occurs.

**Ground equipment:** Thorough spray coverage of grass foliage is essential. For broadcast application, use standard high-pressure pesticide hollow cone or flat fan nozzles. Do not use flood or whirl chamber nozzles. Do not apply **Vantage** with control drop applicator (CDA) nozzles as erratic coverage can cause inconsistent weed control.

Use 5-50 gallons of spray solution per acre (1-10 pints per 1,000 square feet). Adjust pressure to 30-60 psi at the nozzle. Always adjust spray pressure, spray volume, and height of spray boom to ensure thorough coverage of target grasses.

**Air equipment:** Thorough spray coverage of grass foliage is essential. Use a minimum of 5 gallons of water per acre. Increase water volume to 10 gallons per acre if grass foliage is dense or a heavy plant canopy exists.

#### Mixing

Fill the tank of a thoroughly clean sprayer one-half to two-thirds full with clean water. Start agitation, add **Vantage** and the remaining volume of water. Maintain constant agitation during application.

#### Cultivation Information

If cultivation is an option, do not cultivate within 5 days before or 7 days after applying **Vantage**. A timely cultivation 14-21 days after application may help control perennial grasses.

#### General Restrictions and Limitations

Do not apply if rainfall is expected within 1 hour after application as grass control will probably be unsatisfactory.

Do not apply **Vantage** through any type of irrigation system.

Do not apply to grass weeds under stress, such as stress due to lack of moisture, excess moisture, mechanical injury, herbicide injury, diseases or cold temperatures, as unsatisfactory grass control may result.

Do not apply **Vantage** to desirable plants that have been subject to stress conditions such as hail damage, flooding, drought, injury from other herbicides or widely fluctuating temperatures, as injury may result.

Do not use treated vegetation as pasture, hay, feed, or forage.

#### General Tank Mix Recommendations

**Vantage** may be tank mixed with any registered herbicide for the use intended with each product.

All **Directions For Use** and **Restrictions and Limitations** of the respective product must be understood and adhered to. If the respective label recommends that additives, surfactants, or oil concentrates NOT be used, do not tank mix with **Vantage**.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **Vantage** with pesticides (fungicides, herbicides, insecticides, or miticides), additives or fertilizers. BASF does not recommend using **Vantage** tank mixes other than those listed on BASF labeling.

Local horticultural authorities may be a source of information when using combinations other than those recommended by BASF.

Otherwise, test a small area of the desired site with the desired tank mix combination and allow 7-10 days to evaluate potential injury.

# Using Vantage® herbicide on centipedegrass and fine fescue in turf, lawns, and rights-of-way

## Directions For Use

**Vantage** may be used in seedling (first year) and established centipedegrass (*Eremochloa ophiuroides*) and fine fescues which include creeping red fescue and chewings fescue (*Festuca rubra*), sheep fescue (*Festuca ovina*) and hard fescue (*Festuca longifolia*). **Vantage** does not control yellow and purple nutsedge (nutgrass), annual bluegrass, or broadleaf weeds.

## Timing of Application

Apply **Vantage** to actively growing grassy weeds as specified in the **Recommendations for Grass Control**. Apply **Vantage** no earlier than 3 weeks after spring green-up of centipedegrass turf. Apply **Vantage** before annual grasses become extensively tillered. Delay all treatment with **Vantage** until newly planted centipedegrass has 3 inches of new stolon growth.

## Mowing

Adequate coverage of the leaf surface is necessary for absorption of this herbicide. Therefore, centipedegrass and fine fescue areas should not be mowed within 7 days before or after applying **Vantage**. Increased control has been observed when mowing is delayed until 14 days after application.

## Restrictions and Limitations

Read and abide by all **General Restrictions and Limitations** listed on page 4.

On seedling centipedegrass, do not apply more than 1.5 pints of **Vantage** per acre, per application or a total of 3 pints per acre, per season.

On established centipedegrass, do not apply more than 2.25 pints of **Vantage** per acre, per application or more than a total of 4.5 pints per acre, per season.

Do not use on tall fescue (*Festuca arundinacea*) as injury may occur. Do not apply **Vantage** to any desirable turfgrass other than centipedegrass and fine fescue varieties classified as creeping red, chewings, sheep or hard fescue because other turf species may be seriously injured.

**Table 1. Recommendations for Annual Grass Control in Seedling Centipedegrass and Fine Fescue**

Grass	Time of Application**	Vantage	
		Rate Per Acre	Rate Per 1,000 sq. ft.
Crabgrass, Large Smooth Goosegrass	Up to 4"	1.5 pints	0.5 fluid ounces*

\* 1 tablespoon = 0.5 fluid ounces

\*\* If the grass weeds have been mowed numerous times and are extensively tillered, control may be reduced.

**Table 2. Recommendations for Annual Grass Control in Established Centipedegrass and Fine Fescue**

Grass	Time of Application	Vantage	
		Rate Per Acre	Rate Per 1,000 sq. ft.
Crabgrass, Large Smooth Goosegrass	Up to 4". Apply before grass weeds become well established through tiller development.	2.25 pints	0.75 fluid ounces*

\* 1 tablespoon = 0.5 fluid ounces

**Table 3. Recommendations for Perennial Grass Control in Seedling Centipedegrass and Fine Fescue**

Grass	Time of Application	Vantage	
		Rate Per Acre	Rate Per 1,000 sq. ft.
Bahiagrass*			
First Application	Up to 4"	2.25 pints	0.75 fluid ounces**
Second Application	When regrowth is less than 4" generally 10-14 days later.	2.25 pints	0.75 fluid ounces**

\* Do not mow within 7 days before application or within 14 days after application for best control.

\*\* 1 tablespoon = 0.5 fluid ounces

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### **Bahiagrass Control and Seedhead Suppression in Established Centipedegrass**

Established bahiagrass is very difficult to control because of its extensive rhizome system. One application of **Vantage®** herbicide will burn down the bahiagrass, but many plants will regrow. However, this regrowth is weak and seedheads will generally be suppressed for 40 days after the first application.

A second application of **Vantage** will be necessary for bahiagrass control. Under optimum growing conditions, this second application should be made as soon as 10-14 days after the first application. The second application should be made when the bahiagrass regrowth is young and actively growing and before it has reached a height of 4 inches.

Depending upon environmental conditions and cultural practices, season-long control may not always be obtained. However, competition of the bahiagrass with the centipedegrass turf will be reduced. In addition, any remaining bahiagrass will be less noticeable because of the long-term seedhead suppression provided by the second application of **Vantage**.

### **Using Vantage + Basagran® T/O Herbicide Tank Mix in Established Turf, Lawns, and Rights-of-way**

(Not applicable in California)

A tank mix of **Vantage** and **Basagran T/O** may be applied to control yellow nutsedge (nutgrass), grass, and broadleaf weeds in centipedegrass and fine fescue areas. Applied as directed, this tank mix will control susceptible weeds listed on each label.

Read each product label for directions, restrictions, and limitations before using. The most restrictive labeling applies to all tank mixes.

### **Timing and Application Information**

This tank mix may be applied to established turf grass. Do not apply to newly seeded turf sites until the turf has become fully established. Tank mix 2.25 pints of **Vantage** with 2-4 pints of **Basagran T/O** according to the directions on the **Basagran T/O** label.

The use of oil concentrate in this tank mix is not recommended.



Using Vantage® Herbicide in Fine Fescue (creeping red, chewings, hard and sheep) Grown for Turf Seed (Not for use in California)

#### Directions For Use

Vantage may be used to control annual and perennial grass weeds in fine fescue. To control annual ryegrass, downy brome, German velvetgrass, and Colonial and Highland bentgrasses in the Pacific Northwest, apply Vantage when the fine fescue is semi-dormant, which is generally from November 1 through March 15 (see **Application Rate Table for Pacific Northwest only**).

Applying Vantage at other times of the year will generally result in reduced control of these problem grass weeds.

For grass control in other Northern climates, see **Application Rate Table for Annual Grass Control** or **Application Rate Table for Perennial Grass Control**.

Because most grass crops such as sorghum, corn, small grains, and rice, as well as many ornamental turf grasses (except the fine fescues and centipedegrass), are extremely susceptible to Vantage, avoid all direct or indirect contact with any desired grass plant. However, Vantage does not control annual bluegrass or raintail fescue.

#### Restrictions and Limitations

Read and abide by all **General Restrictions and Limitations** listed on page 4.

Do not apply Vantage to tall fescue because injury may occur.

Table 4. Application Rate Table for Vantage (Pacific Northwest only)

Grass Species	Application Time (Weed Size)	Vantage* (Rate per Acre)
<b>Annual Grasses</b> Annual Ryegrass ( <i>Lolium multiflorum</i> )	4-8"	2.25 pints
Downy Brome ( <i>Bromus tectorum</i> ) Also called cheatgrass	2-6"	3.75 pints
<b>Perennial Grasses</b> German Velvetgrass ( <i>Holcus mollis</i> )	2-4"	3-3.75 pints
Colonial and Highland Bentgrasses ( <i>Agrostis tenuis</i> )	2-4"	2.25-3.75 pints

The higher rate of Vantage is recommended for use on well-established grass weeds.  
\* If regrowth occurs or new plants emerge, make a second application at the same rate and time.

Table 5. Application Rate Table for Annual Grass Control (Other than Pacific Northwest)

Grass Species	Vantage Application Rate	
	Grass up to 6" height	Grass up to 12" height
Barnyardgrass Broadleaf Signalgrass Crabgrass, Large , Smooth Foxtails, Giant , Green , Yellow Goosegrass Johnsongrass, Seedling Junglerice Lovegrass Orchardgrass Seedling Panicum, Browntop , Fall , Texas Ryegrass, Annual Sandbur, Field Shattercane/Wildcane Sprangletop, Red* Tall Fescue, Seedling Volunteer, Barley , Oats , Rye , Wheat Wild Oats Wild Proso Millet Witchgrass Woolly Cupgrass	2.25 pints per acre or 0.8 fluid ounces per 1,000 square feet	3.75 pints per acre or 1.4 fluid ounces per 1,000 square feet

\* Not recommended in CA, AZ, or Western NM.

Table 6. Application Rate Table for Perennial Grass Control (Other than Pacific Northwest)

Grass	Application Time (Weed Size)	Vantage	
		Rate per acre	Rate per 1,000 square feet
Bermudagrass	Up to 6" runners	3.75 pints	1.4 fluid ounces
Johnsongrass, Rhizome	15-20" height		
Quackgrass	6-8" height		
Wirestem Muhly	Up to 6" height	2.25 pints	0.8 fluid ounces

Using Vantage® Herbicide in Nonbearing Food Crops, Ornamental and Nursery Plantings, Rights-of-way, Nonfood Crop Areas, Noncrop Areas and Fallow Land

### Directions For Use

Postemergence applications of **Vantage** may be made to nonbearing food crops, nursery liners, trees, shrubs, ornamentals, bedding plants, cut flowers, and ground covers including those listed in the **Appendix**. If species in the application site are not listed in the **Appendix**, **Vantage** may be applied as a directed spray away from the foliage of desired plants.

**Vantage** may also be applied to sites such as rights-of-way, fallow land, noncrop areas and nonfood crop areas such as airports, industrial sites, roadsides, storage yards, and other areas listed on page 4.

Apply to actively growing grasses at the sizes indicated in the tables for **Annual Grass Control with Vantage** and **Perennial Grass Control with Vantage**.

### Annual Grass Control with Vantage

In irrigated areas, it may be necessary to irrigate before treating with **Vantage** to ensure active weed growth.

Do not mow within 20 days before or 7 days after application. Grasses that have been mowed or have regrown from mowed stubble may be controlled poorly.

Repeat application if new germination or regrowth occurs.

### Restrictions and Limitations

Read and abide by all **General Restrictions and Limitations** listed on page 4.

**Table 7. Annual Grass Control with Vantage**

Grass	Vantage Rate	
	Grass up to 6" height	Grass up to 12" height
Barnyardgrass Broadleaf Signalgrass Crabgrass, Large , Smooth Foxtails, Giant , Green , Yellow Goosegrass Johnsongrass, Seedling Junglerice Lovegrass Orchardgrass Seedling Panicum, Browntop , Fall , Texas Red Sprangletop* Sandbur Field Shattercane/Wildcane Tall Fescue, Seedling Volunteer, Barley , Oats , Rye , Wheat Wild Oats Wild Proso Millet Witchgrass Woolly Cupgrass	2.25 pints per acre or 0.8 fluid ounces per 1,000 square feet	3.75 pints per acre or 1.4 fluid ounces per 1,000 square feet

\* Not recommended in CA, AZ, or Western NM.

**Table 8. Perennial Grass Control with Vantage**

Grass	Maximum Size Range	Vantage	
		Rate per acre	Rate per 1,000 square feet
Bermudagrass	Up to 6" runners	3.75 pints	1.4 fluid ounces
Johnsongrass, Rhizome	15-20" height		
Quackgrass	6-8" height	2.25 pints	0.8 fluid ounces
Wirestem Muhly	Up to 6" height		

### Spot Treatment Application with Vantage® herbicide

To control grasses when using knapsack sprayers, equipment with hand guns, or other suitable nozzle arrangements, prepare a solution of **Vantage** in water according to **Tables 9-11**.

Apply to actively growing grasses at the sizes indicated below.

Apply to the foliage of grasses on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to the point of runoff.

**Table 9. Spot Treatment Application Table Annual Grass Control with Vantage**

Grass	Vantage Concentration in Spray Solution	
	Grass Up to 6" Height	Grass Up to 12" Height
See annual grasses listed on page 8.	1.5%	2.25%

**Table 10. Perennial Grass Control with Vantage**

Grass	Maximum Size Range	Vantage Concentration in Spray Solution*
Bermudagrass	Up to 6" runners	2.25%
Johnsongrass, Rhizome	15-20" height	2.25%
Quackgrass	6-8" height	2.25%
Wirestem Muhly	Up to 6" height	1.5%

\* Refer to **Table 11, Solution Table** for preparing a spray solution volume.

**Table 11. Solution Table for Spot Treatments**

Desired Spray Solution Volume	Amount of Vantage to be Added for Solution	
	1.5%	2.25%
1 gallon	2 fluid ounces	3 fluid ounces
3 gallons	5.75 fluid ounces	8.75 fluid ounces
5 gallons	8.75 fluid ounces	14.5 fluid ounces

### Using Vantage in Christmas Trees and Deciduous Tree Farms

**Vantage** may be used to control annual and perennial grasses in Christmas and deciduous tree farms. Consult **Table 12** or the **Appendix** for tolerant species for postemergence application. Apply as a directed spray to species not listed, while avoiding direct or indirect application to the foliage. To control grasses, consult the tables **Annual Grass Control with Vantage** and **Perennial Grass Control with Vantage**. If a Christmas tree or deciduous tree is not listed in **Table 12** or in the **Appendix**, the user may determine if **Vantage** can be used safely prior to broad use by applying the recommended use rate of **Vantage** to the target plant on a small test area under the conditions expected to be encountered.

Any adverse effects should be visible within 7 days.

**Table 12. Christmas Trees**

Common Name	Scientific Name
Fir, Balsam	<i>Abies balsamea</i>
, Douglas	<i>Pseudotsuga menziesii</i>
, Fraser	<i>Abies fraseri</i>
, Grand	<i>Abies grandis</i>
, Noble	<i>Abies procera</i> (A. nobilis)
, Nordmann	<i>Abies nordmanniana</i>
, Red	<i>Abies magnifica</i>
, Shasta	<i>Abies magnifica</i>
, Turkish	
, White	<i>Abies concolor</i>
Hemlock, Canada	<i>Tsuga canadensis</i>
Pine, Austrian	<i>Pinus nigra</i>
, Lodgepole	<i>Pinus contorta latifolia</i>
, Monterey	<i>Pinus radiata</i>
, Ponderosa	<i>Pinus ponderosa</i>
, Scotch	<i>Pinus sylvestris</i>
, Southern (Longleaf)	<i>Pinus palustris</i>
, Virginia	<i>Pinus virginiana</i>
, White	<i>Pinus strobus</i>
Spruce, Black Hills	<i>Picea glauca</i>
, Colorado Blue	<i>Picea pungens</i>
, Norway	<i>Picea abies</i>
, White	<i>Picea glauca</i>

Read and abide by all **General Restrictions and Limitations** listed on page 4.

### Using Vantage + Basagran® T/O 10/29 Tank Mix in Ornamental Sites

A tank mix of **Vantage + Basagran T/O** may be applied as a directed spray to control yellow nutsedge, grass, and broadleaf weeds in non-bearing food crops and ornamental sites including trees, shrubs, bedding plants, and ground covers. This tank mix should be applied as a directed spray away from the foliage of desired plants. If any desirable plant foliage receives direct or indirect application, wash off immediately. The use of an oil concentrate as mentioned on the **Basagran T/O** label is not necessary in this tank mix. Over-the-top applications of this tank mix may be made to certain ground covers. Consult the **Basagran T/O** label for this listing.

Read each product label for directions, and **Restrictions and Limitations** before using. The most restrictive labeling applies in all tank mixes.

### Using Vantage + Surflan® A.S. Herbicide Tank Mix In Ornamental Sites

A tank mix of **Vantage + Surflan A.S.** may be applied to control weeds in ornamental sites including trees, shrubs and groundcovers. Applied as directed, this tank mix will control susceptible weeds listed on each label.

Read each product label for directions, restrictions and limitations prior to use. The most restrictive labeling applies in all tank mixes.

## Vantage\* + Goal® 1.6E Herbicide Tank Mix for Broad Spectrum Grass and Broadleaf Weed Control

(Not for use in California)

Tank mix **Vantage + Goal 1.6E** to control a broad spectrum of grass and broadleaf weeds in conifers and Christmas trees. Consult the **Goal 1.6E** label for the list of broadleaf weeds controlled. This tank mix may be used only on the species listed in **Table 13**.

### Vantage and Goal 1.6E Rates

A maximum of 60 fluid ounces of **Vantage** per acre may be tank mixed with **Goal 1.6E**. A maximum of 2.5 pints of **Goal 1.6E** may be tank mixed with **Vantage**. See previous pages for the minimum recommended rates of **Vantage** and see the **Goal 1.6E** label for minimum rates of **Goal 1.6E**. For season-long control, 2-3 applications may be needed. In some cases, reduced grass control may result when tank mixing **Vantage** with **Goal 1.6E**.

### Timing

Apply to actively growing weeds before conifer bud break or after conifer foliage has had an opportunity to harden off. Broadleaf weeds must be within the height indicated on the **Goal 1.6E** label.

### Spray Volume and Pressure

Apply at 20 gallons per acre and 40 psi.

### Restrictions and Limitations

Read and follow all conifer specific and **General Use Restrictions and Limitations** on the **Vantage** and **Goal 1.6E** labels. The most restrictive labeling applies in tank mixes. Do not apply this tank mix when temperatures exceed 90° F. Do not apply this tank mix to conifer seedlings less than 10 months old. Do not apply this tank mix by aircraft equipment. Do not use spot treatments.

## Vantage + Stinger® Tank Mix

A postemergence tank mix application of **Vantage + Stinger** will not only control a broad spectrum of grasses, but also certain broadleaf weeds such as Canada thistle, clover, vetch, knapweed and suppress other broadleaf weeds.

Consult the **Stinger** labeling for a list of broadleaf weeds controlled. This tank mix may be applied only over-the-top of the following actively growing trees: Fir (balsam, Douglas, Frasier, Grand, Noble) Pine (lodgepole, ponderosa, scotch, white), and Spruce (blue).

### Restrictions and Limitations

Read and follow all **Directions For Use, Precautionary Statements, and Restrictions and Limitations** on the **Vantage** and **Stinger** labels. The most restrictive labeling applies in tank mixes.

In the Pacific Northwest, do not apply this tank mix in the first year of transplanting as injury (leaf curling) may occur.

Do not apply more than 0.5 pint of **Stinger** per acre on blue spruce. Do not add a surfactant or oil concentrate to this tank mix as injury may occur.

## Using Vantage in Tree Farms for Established Tall Fescue Growth Suppression

**Vantage** may be used in tree farms to suppress the growth of tall fescue when grown as a desired ground cover. Tall fescue must be actively growing at the time of **Vantage** application or injury may occur. Follow the directions on rates and timing closely.

### Timing

Apply **Vantage** to actively growing tall fescue after it has had 4-6 inches of new growth, before the emergence of seedheads and before conifer bud break. Application from July 1 to mid-August may be less effective, especially if day temperatures reach 90° F. Tall fescue must be one year old before the first application of **Vantage**.

Adequate coverage of the leaf surface is necessary for absorption of this herbicide; thus, do not mow tall fescue turf for 30 days before or 14 days after application of **Vantage** for optimum control.

### Rate

Apply 24-30 fluid ounces of **Vantage** per acre. For greater fescue suppression, up to 60 fluid ounces of **Vantage** can be used per acre. Because of environmental differences at application and growth differences of tall fescue, suppression of tall fescue may differ from that desired. Users of **Vantage** are advised to begin using **Vantage** at the minimum recommended rate and adjust rates as local conditions and experience dictate. Additional applications may be made if extended growth suppression is desired.

### Restrictions and Limitations

Read and abide by all **General Restrictions and Limitations** on page 4.

Do not apply to grasses under stress, such as stress due to lack of moisture, herbicide injury, or cold temperatures, because unsatisfactory suppression may result.

Table 13.

Common Name	Scientific Name
Fir, Frasier	<i>Abies fraseri</i>
Hemlock, Canada*	<i>Tsuga canadensis</i> *
Pine, Virginia	<i>Pinus virginiana</i>
Pine, White	<i>Pinus strobus</i>
Spruce, Norway	<i>Picea abies</i>

\* Canada Hemlock has a prolonged period of bud break and new growth, thus directed applications are recommended during this period.

### Using Vantage™ herbicide in Wildflowers

**Vantage** may be used to control grass in native wildflowers on roadsides and landscapes.

**Vantage** will reduce the competition from grasses on wildflower species. Grass competition can cause flower stand thinning, stunting and reduced seed production, reducing the aesthetic value and the resetting potential of the wildflower stand. Many wildflower species are tolerant of **Vantage** applications such as those listed in the **Appendix**. However, apply **Vantage** prior to blooming.

### Application Timing

Apply **Vantage** to actively growing grass after wildflowers have emerged, but not during flowering. Apply **Vantage** 4-6 weeks after wildflowers have emerged, but always base application timing on grass size. Make broadcast applications according to the **Annual Grass Control with Vantage** and **Perennial Grass Control with Vantage** tables on page 7.

**Vantage** controls emerged grass species and does not give residual control. A second application may be necessary if a new flush of grass occurs later in the growing season. In irrigated areas, it may be necessary to irrigate before treating with **Vantage** to ensure active weed growth.

### Spot Treatment

**Vantage** can be applied using tank-type, knapsack sprayers, high-volume equipment with hand guns, or other suitable nozzle arrangements. Prepare a solution of **Vantage** in water according to the **Solution Table for Spot Treatments** on page 9. Apply to the foliage of grasses on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to the point of runoff.

### Using Vantage on Roadsides, Rights-of-way, and in Nonfood Crop Alleyways for Established Tall Fescue Seedhead Suppression

(Not intended for domestic use, except by professional applicators) When used under the conditions specified in this label, **Vantage** will suppress the initiation and development of the seedheads of established tall fescue.

Discoloration of the fescue will occur soon after application and may persist for 2-8 weeks depending on environmental conditions. Avoid applying to any tall fescue area where discoloration is aesthetically unacceptable.

Treated vegetation may not be used as feed, forage, hay, or silage.

**Vantage** will not injure clovers, vetch, or other broadleaf plants that may be present.

### Timing and Application Information

#### Timing

Generally, apply **Vantage** to actively growing tall fescue before the emergence of seedheads in the spring. Do not apply after May 1 in Alabama, Georgia, and Tennessee; timing may vary in other areas.

Tall fescue must be one year old before the first application of **Vantage**.

Do not apply to grasses under stress, such as stress due to lack of moisture, mechanical injury, herbicide injury, or cold temperatures, because unsatisfactory seedhead suppression may result. Adequate coverage of the leaf surface is necessary for absorption of this herbicide; thus, do not mow turf for 30 days before or 14 days after applying **Vantage** for optimum control.

#### Rate

Apply 1.5 pints of **Vantage** per acre.

Do not make more than one application of **Vantage** to tall fescue per year.

#### Spray volume

Thorough spray coverage of grass foliage is essential. Use 30-50 gallons per acre.

### Total Vegetation Suppression <sup>12/29</sup>

A reduction in grass competition may make certain broadleaf weeds appear more prominent or may allow new weeds to germinate.

**Vantage** does not control or suppress broadleaf plants. A program for total vegetation suppression may necessitate the use of a broadleaf herbicide.

Any combination treatment using **Vantage**, either tank mixed or sequential, should be tested to determine if seedhead growth suppression is maintained without increased injury or discoloration to tall fescue or other desired plant species.

Read and abide by all **General Restrictions and Limitations** listed on page 4.

### Procedure for Cleaning Spray Equipment

**Attention!** Clean the sprayer thoroughly before and after applying **Vantage**, particularly if a herbicide with the potential to injure the crop to be sprayed with **Vantage** was used.

Failure to clean the sprayer thoroughly after applying **Vantage** may result in injury to any grass crop sprayed subsequently.

Fill the sprayer with clean water and add a commercial sprayer cleaner or a surfactant/adjuvant at the recommended rate on its label. Circulate the solution through the entire sprayer system. Spray approximately half the tank solution through the hoses, booms, and nozzles to clean these parts. Drain the tank and rinse the total system thoroughly several times with clean water.

# Appendix

## Trees

### Listed by common name

Acacia, Knife Leaf  
(*Acacia cultriformis*)  
Arborvitae, Eastern (var: Teehny)  
(*Thuja occidentalis*)  
Arborvitae, Berkman's, Oriental  
(*Thuja orientalis*)  
Ash, Green  
(*Fraxinus pennsylvanicum*)  
Ash, Mountain  
(*Sorbus aucuparia*)  
Ash, Mountain  
(*Sorbus americana decora*)  
Ash, White  
(*Fraxinus americana*)  
Basswood, American  
(*Tilia americana*)  
Berkman's, Oriental  
(*Thuja orientalis*)  
Birch  
(*Betula* sp.)  
Birch, Asian White (var. Japonica)  
(*Betula platyphylla*)  
Birch, European White  
(*Betula pendula*)  
Birch, paper  
(*Betula papyrifolia*)  
Birch, River, Black or Red  
(*Betula nigra*)  
Black Locust  
(*Robinia pseudoacacia*)  
Bottle-brush  
(*Callistemon lanceolatus*)  
Bottle Tree  
(*Brachychiton populneus*)  
Brisbane Box Tree  
(*Tristania conferta*)  
Cajuput Tree  
(*Melaleuca quinquenervia*)  
Carob Tree  
(*Ceratonia siliqua*)  
Carrot Wood  
(*Cupaniopsis anacardioides*)  
Catalpa, Southern  
(*Catalpa bignonioides*)  
Cherry Black  
(*Prunus serotina*)  
Cherry, Carolina  
(*Prunus caroliniana "compacta"*)  
Crabapple, Flowering  
(var Dalgo, Radiant, Red Splendor, Royalty,  
Vanguard, Sylvestris, Domestic)  
(*Malus* sp.)  
Cypress, False  
(*Chamaecyparis pisifera*)  
Cypress, Leyland  
(*Cupressocyparis leylandii*)  
Cypress, Italian  
(*Cupressus sempervirens*)  
Dogwood, Flowering  
(*Cornus florida*)  
Dogwood, Silky  
(*Cornus amomum*)  
Dogwood, Pagoda  
(*Cornus alternifolia*)  
Elm, Chinese Evergreen  
(*Ulmus parvifolia*)

### Listed by scientific name

*Abies balsamea*  
(Fir, White)  
*Abies concolor*  
(Fir, White)  
*Abies fraseri*  
(Fir, Frasier)  
*Abies* sp.  
(Fir)  
*Acacia baileyana (purpurea)*  
(Purpleleaf)  
*Acacia cultriformis*  
(Acacia, Knife leaf)  
*Acer palmatum*  
(Maple, Japanese)  
*Acer rubrum*  
(Maple, Red)  
*Acer saccharinum*  
(Maple, Silver)  
*Agonis flexuosa*  
(Willow, Peppermint)  
*Albizia julibrissin*  
(Mimosa tree, silk tree)  
*Arbutus unedo*  
(Strawberry Tree)  
*Arecastrum romanzoffianum*  
(Queen palm)  
*Betula nigra*  
(Birch, River, Black or Red)  
*Betula papyrifolia*  
(Birch, paper)  
*Betula pendula*  
(Birch, European White)  
*Betula platyphylla*  
(Birch, Asian White)  
(var: Japonica)  
*Betula* sp.  
(Birch)  
*Brachychiton populneus*  
(Bottle tree)  
*Callistemon lanceolatus*  
(Bottle-brush)  
*Catalpa bignonioides*  
(Catalpa, Southern)  
*Celtis occidentalis*  
(Hackberry, Common)  
*Ceratonia siliqua*  
(Carob tree)  
*Chamaecyparis pisifera*  
(Cypress, False)  
*Chamaerops humilis*  
(Palm, Mediterranean fan)  
*Cornus alternifolia*  
(Dogwood, Pagoda)  
*Cornus amomum*  
(Dogwood, Silky)  
*Cornus florida*  
(Dogwood, Flowering)  
*Cupaniopsis anacardioides*  
(Carrot Wood)  
*Cupressocyparis leylandii*  
(Cypress, Leyland)  
*Cupressus sempervirens*  
(Cypress, Italian)  
*Cycas revoluta*  
(Palm, Sago)  
*Elaeagnus angustifolia*  
(Olive, Russian)  
*Eriobotrya japonica*  
(Loquat)

**Trees (continued)**  
**Listed by common name**

Eucalyptus  
 (*Eucalyptus robusta*)  
 (*Eucalyptus lehmannii*)  
 (*Eucalyptus nicholi*)  
 (*Eucalyptus granis*)  
 Fir  
 (*Abies* sp.)  
 Fir, Douglas  
 (*Pseudotsuga menziesii*)  
 Fir, Frasier  
 (*Abies fraseri*)  
 Fir, White  
 (*Abies concolor*)  
 Goldenrain Tree  
 (*Koelreuteria paniculata*)  
 Guava  
 (*Psidium littorale*)  
 Guava, Pineapple  
 (*Feijoa sellowiana*)  
 Gum, Blue  
 (*Eucalyptus globulus*)  
 Gum, Lemon-scented  
 (*Eucalyptus citriodora*)  
 Gum, Red Box  
 (*Eucalyptus polyanthemos*)  
 Hackberry, Common  
 (*Celtis occidentalis*)  
 Hemlock, Canadian  
 (*Tsuga canadensis*)  
 Holly, Chinese  
 (var: *Bufordii*, *Rotunda*)  
 (*Ilex cornuta*)  
 Holly, Hybrid (var *Nellie Stevens*)  
 (*Ilex spares*)  
 Holly, Japanese  
 (var: *Convexa*, *Compacta*, *Helleri*, *Hoogendorn*)  
 (*Ilex crenata*)  
 Holly, Yaupon  
 (*Ilex vomitoria*)  
 Ironbark, Red  
 (*Eucalyptus sideroxylon*)  
 Jacaranda  
 (*Jacaranda mimosifolia*)  
 Kentucky Coffee Tree  
 (*Gymnocladus dioicus*)  
 Larch, European  
 (*Larix europaea*)  
 Laurel, Indian  
 (*Ficus microcarpa nitida*)  
 Linden  
 (*Tilia americana*)  
 Linden, Littleleaf  
 (*Tilia cordata*)  
 Locust, Honey  
 (*Gleditsia triacanthos inermis*)  
 Loquat  
 (*Eriobotrya japonica*)  
 Magnolia Southern  
 (*Magnolia grandiflora*)  
 Maple, Red  
 (*Acer rubrum*)  
 Maple, Japanese  
 (*Acer palmatum*)  
 Maple, Silver  
 (*Acer saccharinum*)  
 Mimosa Tree (silk tree)  
 (*Albizia julibrissin*)

**Listed by scientific name**

*Eucalyptus citriodora*  
 (Gum, Lemon-scented)  
*Eucalyptus globulus*  
 (Gum, Blue)  
*Eucalyptus granis*  
 (Eucalyptus)  
*Eucalyptus lehmannii*  
 (Bushy Yate)  
*Eucalyptus nicholi*  
 (Nichol's Willow)  
 (Leafed Peppermint)  
*Eucalyptus polyanthemos*  
 (Gum, Red Box, Silver Dollar)  
*Eucalyptus robusta*  
 (Eucalyptus)  
*Eucalyptus sideroxylon*  
 (Ironbark, Red)  
*Feijoa sellowiana*  
 (Pineapple, Guava)  
*Ficus benjamina*  
 (Weeping Fig, Exotica, Weeping Banyan)  
*Ficus microcarpa nitida*  
 (Laurel, Indian)  
*Fraxinus americana*  
 (Ash, White)  
*Fraxinus pennsylvanicum*  
 (Ash, Green)  
*Geijera parviflora*  
 (Willow, Australian)  
*Gleditsia triacanthos inermis*  
 (Locust, Honey)  
*Gymnocladus dioicus*  
 (Kentucky Coffee Tree)  
*Ilex cornuta*  
 (Holly, Chinese)  
 (var: *Bufordii*, *Rotunda*)  
*Ilex crenata*  
 (Holly, Japanese)  
 (var *Compacta*, *Convexa*, *Helleri*, *Hoogendorn*)  
*Ilex spares*  
 (Holly, Hybrid)  
 (var: *Nellie Stevens*)  
*Ilex vomitoria*  
 (Holly, Yaupon)  
*Jacaranda mimosifolia*  
 (Jacaranda)  
*Juglans nigra*  
 (Walnut, Black)  
*Koelreuteria paniculata*  
 (Goldenrain Tree)  
*Larix europaea*  
 (Larch, European)  
*Leptospermum laevigatum*  
 (Tea tree, Australian)  
*Liquidambar styraciflua*  
 (Gum, Sweet)  
*Liriodendron tulipifera*  
 (Popular, Yellow, Tulip Tree)  
*Maclura pomifera*  
 (Osage Orange)  
*Magnolia grandiflora*  
 (Magnolia, Southern)  
*Malus* sp.  
 (Crabapple, Flowering)  
 (var: *Dalgo*, *Domestic*, *Silvestris*, *Radiant*,  
*Yanguard*, *Royalty*, *Red Splendor*)  
*Melaleuca quinquenervia*  
 (Cajuput Tree)

**Trees (continued)**  
**Listed by common name**

Myoporum  
 (Myoporum laetum)  
 New Zealand Christmas Tree  
 (Metrosideros excelsus)  
 Oak  
 (Quercus)  
 Oak, Water  
 (Quercus nigra)  
 Oak, Willow  
 (Quercus phellos)  
 Olive Tree  
 (Olea europaea)  
 Olive, Russian  
 (Elaeagnus angustifolia)  
 Orchid Tree, Purple  
 (Bauhinia variegata)  
 Osage Orange  
 (Maclura pomifera)  
 Palm, Mediterranean fan  
 (Chamaerops humilis)  
 Palm, Pygmy Date  
 (Phoenix roebelenii)  
 Palm, Queen  
 (Arecastrum romanzoffianum)  
 Palm, Sago  
 (Cycas revoluta)  
 Palm, Windmill  
 (Tracheocarpus fortunei)  
 Palo Verde, Green  
 (Parkinsonia aculeata)  
 Paulownia Royal  
 (Paulownia tomentosa)  
 Pear, Common  
 (Pyrus communis)  
 Pear, Evergreen  
 (Pyrus kawakamii)  
 Pear, Ussurian  
 (Pyrus ussuriensis)  
 Pepper, Brazilian  
 (Schinus terebinthifolius)  
 Pine, Aleppo  
 (Pinus halepensis)  
 Pine, Austrian  
 (Pinus nigra)  
 Pine, Canary Island  
 (Pinus canariensis)  
 Pine, Caribbean Slash  
 (Pinus caribaea)  
 Pine, Italian Stone  
 (Pinus pinea)  
 Pine, Jack  
 (Pinus banksiana)  
 Pine, Japanese Black  
 (Pinus thunbergii)  
 Pine, Loblolly  
 (Pinus taeda)  
 Pine, Mugho  
 (Pinus mugho)  
 Pine, Ponderosa, Western yellow  
 (Pinus ponderosa)  
 Pine, Red  
 (Pinus resinosa)  
 Pine, Scotch  
 (Pinus sylvestris)  
 Pine, Shore  
 (Pinus contra)  
 Pine, Slash  
 (Pinus ellottii)

**Listed by scientific name**

Metrosideros excelsus  
 (New Zealand Christmas Tree)  
 Mimosa pudica  
 (Sensitive Plant)  
 Myoporum laetum  
 (Myoporum)  
 Olea europaea  
 (Olive Tree)  
 Parkinsonia aculeata  
 (Palo Verde, Green)  
 Paulownia tomentosa  
 (Paulownia, Royal, Empress Tree)  
 Phoenix roebelenii  
 (Palm, Pygmy Date)  
 Picea abies  
 (Spruce, Norway)  
 Picea glauca  
 (Spruce, White)  
 Picea glauca  
 (Spruce, Black Hills)  
 (var. Densata)  
 Picea pungens  
 (Spruce, Colorado Blue)  
 Pinus banksiana  
 (Pine, Jack)  
 Pinus canariensis  
 (Pine, Canary Island)  
 Pinus caribaea  
 (Pine, Caribbean slash)  
 Pinus contra  
 (Pine, Shore)  
 Pinus ellottii  
 (Pine, Slash)  
 Pinus halepensis  
 (Pine, Aleppo)  
 Pinus mugo  
 (Pine, Mugho)  
 Pinus nigra  
 (Pine, Austrian Black)  
 Pinus palustris  
 (Pine, Southern, Long Leaf)  
 Pinus parviflora  
 (Pine, Japanese White)  
 Pinus pinea  
 (Pine, Italian Stone)  
 Pinus ponderosa  
 (Pine, Ponderosa, Yellow)  
 Pinus resinosa  
 (Pine, Red)  
 Pinus strobus  
 (Pine, White)  
 Pinus sylvestris  
 (Pine, Scotch)  
 Pinus taeda  
 (Pine, Loblolly)  
 Pinus thunbergiana  
 (Pine, Japanese Black)  
 Pinus virginiana  
 (Pine, Virginia)  
 Pittosporum phylliraeoides  
 (Willow, Desert)  
 Platanus occidentalis  
 (Sycamore)  
 Podocarpus macrophyllus  
 (Pine, Yew)  
 Populus alba  
 (Poplar, White)



**Trees (continued)**  
**Listed by common name**

Pine, Southern  
 (*Pinus palustris*)  
 Pine, Virginia  
 (*Pinus virginiana*)  
 Pine, White  
 (*Pinus strobus*)  
 Pine, White, Japanese  
 (*Pinus parviflora*)  
 Pine, Yew  
 (*Podocarpus macrophyllus*)  
 Plum, Wild  
 (*Prunus americana*)  
 Poplar, Hybrid  
 (*Populus alba*)  
 Poplar, Yellow, Tulip Tree  
 (*Liriodendron tulipifera*)  
 Purpleleaf, Bailey Acacia  
 (*Acacia baileyana*)  
 Redwood, Coast  
 (*Sequoia sempervirens*)  
 Sandcherry, Western  
 (*Prunus besseyi*)  
 Sensitive Plant  
 (*Mimosa pudica*)  
 Silk Tree  
 (*Albizia julibrissin*)  
 Spruce, Black Hills (var. *Densata*)  
 (*Picea glauca*)  
 Spruce, Colorado Blue  
 (*Picea pungens*)  
 Spruce, Norway  
 (*Picea abies*)  
 Spruce, White  
 (*Picea glauca*)  
 Strawberry Tree  
 (*Arbutus unedo*)  
 Sumac, Standard, African  
 (*Rhus lancea*)  
 Sweet Gum  
 (*Liquidambar styraciflua*)  
 Sycamore  
 (*Platanus occidentalis*)  
 Tea Tree, Australian  
 (*Leptospermum laevigatum*)  
 Tipu Tree  
 (*Tipuana tipu*)  
 Walnut, Black  
 (*Juglans nigra*)  
 Weeping Fig, Exotica  
 (*Ficus benjamina*)  
 Willow  
 (*Salix matsudana tortuosa*)  
 Willow, Australian  
 (*Geijera parviflora*)  
 Willow, Desert  
 (*Pittosporum phillyraeoides*)  
 Willow, Peppermint  
 (*Agonis flexuosa*)  
 Yate, Bushy  
 (*Eucalyptus lehmannii*)  
 Yew, English  
 (*Taxus baccata*)

**Listed by scientific name**

*Prunus americana*  
 (Plum, Wild)  
*Prunus besseyi*  
 (Sandcherry, Western)  
*Prunus caroliniana "compacta"*  
 (Cherry, Carolina)  
*Prunus mahaleb*  
*Prunus myro*  
*Prunus serotina*  
 (Cherry, Black)  
*Pseudotsuga menziesii*  
 (Fir, Douglas)  
*Psidium littorale*  
 (Guava)  
*Pyrus communis*  
 (Pear, Common)  
*Pyrus kawakamii*  
 (Evergreen Pear)  
*Pyrus ussuriensis*  
 (Pear, Ussurian)  
*Quercus*  
 (Oak)  
*Quercus nigra*  
 (Oak, Water)  
*Quercus phellos*  
 (Oak, Willow)  
*Rhus lancea*  
 (Sumac, African Standard)  
*Robinia pseudoacacia*  
 (Locust, Black)  
*Salix matsudana tortuosa*  
 (Willow)  
*Schinus terebinthifolius*  
 (Pepper, Brazilian)  
*Sequoia sempervirens*  
 (Coast, Redwood)  
*Sorbus aucuparia*  
 (Ash, Mountain)  
*Sorbus americana decora*  
 (Ash, Mountain)  
*Taxus baccata*  
 (Yew, English)  
*Thuja occidentalis*  
 (Arborvitae, American)  
 (var. *Teenhny*)  
*Thuja orientalis*  
 (Berkmans, Oriental Arborvitae)  
*Tilia americana*  
 (Linden, American Basswood)  
*Tilia cordata*  
 (Linden, Little-leaf)  
*Tipuana tipu*  
 (Tipu Tree)  
*Tracheocarpus fortunei*  
 (Palm, Windmill)  
*Tristania conferta*  
 (Brisbane Box Tree)  
*Tsuga canadensis*  
 (Hemlock, Canadian)  
*Ulmus parvifolia*  
 (Elm, Chinese Evergreen)

**Shrubs**  
**Listed by common name**

Abelia, Glossy  
(*Abelia grandiflora*)  
Acacia, Bailey  
(*Acacia baileyana*)  
Acacia, Knife Leaf  
(*Acacia cultriformis*)  
Acacia, Prostrate  
(*Acacia redolens*)  
Acacia, Sydney Golden Wattle  
(*Acacia longifolia*)  
Andromeda  
(*Pieris japonica*)  
Arborvitae, Oriental  
(*Platycladus orientalis*)  
Arrowwood, Southern  
(*Viburnum dentatum*)  
Azalea, Mollis hybrid  
(*R. x kosterianum*)  
Azalea, Northern Lights Hybrid  
(*R x kosterianum x R prinophyllum*)  
Bamboo, Heavenly  
(*Nandina domestica*)  
Barberry, Japanese  
(*Berberis thunbergii*)  
Barberry, Korean  
(*Berberis koreana*)  
Barberry, Redleaf  
(*Berberis virginian*)  
Bird of Paradise Bush  
(*Caesalpinia gillesii*)  
Bluebeard  
(*Caryopteris clandonensis*)  
Boxwood, Common  
(*Buxus sempervirens*)  
Boxwood, African  
(*Myrsine africana*)  
Boxwood, Japanese  
(var: *Japonica*)  
(*Buxus microphylla*)  
Buckthorn, Glossy, Alder  
(*Rhamnus frangula*)  
Camellia  
(*Camellia japonica*)  
Camellia  
(*Camellia sasanqua*)  
Cedar, Eastern Red  
(var: *Pyramidiformus, canearl*)  
(*Juniperus virginiana*)  
Cherry, Brush  
(*Eugenia myrtifolia*)  
Cherry, Manchu, Nanking  
(*Prunus tomentosa*)  
Chokecherry sp.  
(*Aronia meloelata*)  
Copper Plant, Caribbean  
(*Euphoria cotinifolia*)  
Cotoneaster, Bearberry  
(*Cotoneaster dammerii*)  
Cotoneaster, Cranberry  
(*Cotoneaster apiculata*)  
Cotoneaster 'lowfast'  
Cotoneaster, Peking  
(*Cotoneaster acutifolia*)  
Coyote Bush  
(*Baccharis pilularis*)  
Cranberry Bush, American  
(*Viburnum trilobum*)  
Cranberry Bush, Golden  
(*Viburnum opulus aureum*)

**Listed by scientific name**

*Abelia grandiflora*  
(Abelia, Glossy)  
*Acacia baileyana*  
(Acacia, Bailey)  
*Acacia cultriformis*  
(Acacia, Knife Leaf)  
*Acacia longifolia*  
(Acacia, Sydney Golden Wattle)  
*Acacia redolens*  
(Acacia, Prostrate)  
*Alyogyne huegelli*  
(Hibiscus, Blue)  
*Amelanchier alnifolia*  
(Serviceberry, Saskatoon)  
(var: Regent)  
*Amelanchier laevis*  
(Serviceberry, Allegheny)  
*Aronia meloelata*  
(Chokecherry sp.)  
*Baccharis pilularis*  
(Coyote Bush)  
*Berberis koreana*  
(Barberry, Korean)  
*Berberis thunbergii*  
(Barberry, Japanese)  
(var: Crimson pygmy)  
*Berberis virginian*  
(Barberry, Redleaf)  
*Brunfelsia calycina*  
(Yesterday-Today-and-Tomorrow)  
*Buxus microphylla*  
(Boxwood, Japanese)  
(var: Japonica)  
*Buxus sempervirens*  
(Boxwood, Common)  
*Caesalpinia gillesii*  
(Bird of Paradise Bush)  
*Calliandra haematocephala*  
(Pink Powder Puff)  
*Camellia japonica*  
(Camellia)  
*Camellia sasanqua*  
(Camellia)  
*Carissa grandiflora*  
(Palm, Natal)  
(var: Green Carpet, Tuttle)  
*Caryopteris clandonensis*  
(Bluebeard)  
*Ceanothus griseus*  
(Mountain lilac, Carmel Creeper)  
*Cistus purpureus*  
(Orchid rockrose)  
*Coprosma 'coppershine'*  
*Coprosma repens*  
(Mirror Plant)  
*Cornus stolonifera*  
(Dogwood, Red Osier)  
*Correa pulchella*  
(Fuchsia, Australian)  
*Cortaderia selloana*  
(Pampas grass)  
*Cotoneaster acutifolius*  
(Cotoneaster, Peking)  
*Cotoneaster apiculata*  
(Cotoneaster, Cranberry)  
*Cotoneaster dammerii*  
(Cotoneaster, Bearberry)  
(var: Coral Beauty)  
*Cotoneaster 'lowfast'*

**Shrubs (continued)**  
**Listed by common name**

Crape Myrtle  
*(Lagerstromia indica)*  
 Currant, Alpine  
*(Ribes alpinum)*  
 Dogwood, Red Osier  
*(Cornus stolonifera)*  
 Elaeagnus  
*(Elaeagnus umbellata)*  
 Escallonia  
*(Escallonia fradesii)*  
*(Escallonia rubia)*  
 Euonymus, Evergreen  
*(var. Golden, Silver King)*  
*(Euonymus japonica)*  
 Euonymus, Winged  
*(Euonymus alata)*  
 Fig, Creeping  
*(Ficus repens)*  
 Firethorn  
*(Pyracantha graberi)*  
 Forsythia, Greenstem  
*(Forsythia viridissima bronxeniss)*  
 Flax, New Zealand  
*(Phormium tenax)*  
 Fuchsia, Australian  
*(Correa pulchella)*  
 Gardenia (var. Mystery, Radicans)  
*(Gardenia augusta)*  
*(Gardenia jasminoides)*  
 Gardenia, Dwarf (var. Veitchii)  
*(Gardenia jasminoides)*  
 Gold Vine, Guinea  
*(Hibbertia scandens)*  
 Hakea  
*(Hakea proteacea)*  
 Hawthorn, Indian  
*(Phaphiolepis indica)*  
 Hibiscus, Blue  
*(Alyogyne huegelli)*  
 Hibiscus, Chinese  
*(Hibiscus rosa-sinensis)*  
 Holly, Dwarf Burford  
*(var. Burfordii Nana)*  
*(Ilex cornuta)*  
 Honeysuckle, Bush  
*(Diervillea lonicera)*  
 Honeysuckle, Cape  
*(Tecomaria capensis)*  
 Hydrangea  
*(Hydrangea macrophylla)*  
 Jasmine Asiatic  
*(Trachelospermum asiaticum)*  
 Jasmine, Orange  
*(Murraya paniculata)*  
 Jasmine, Star  
*(Trachelospermum jasminoides)*  
 Jasmine, Winter  
*(Jasmine nudiflorum)*  
 Jessamine, Carolina  
*(Gelsemium sempervirens)*  
 Jojoba  
*(Simmondsia chinensis)*  
 Juniper, Chinese (var. Maneyi, Old Gold, Pfitzerana,  
 Sea Green, Hekii, Nana, Torulosa, Pfitzerana  
 Aurea, Pfitzer, Golden Pfitzer)  
*(Juniperus chinensis)*

**Listed by scientific name**

*Diervillea lonicera*  
 (Honeysuckle, Bush)  
*Dodonaea viscosa*  
 (Purple Hop Bush)  
 (var. Purpurea)  
*Duranta stenostachya*  
 (Sky Flower, Brazilian)  
*Elaeagnus pungens*  
 (Silverberry)  
*Elaeagnus umbellata*  
 (Elaeagnus)  
*Escallonia exoniensis*  
 (Escallonia)  
*Escallonia 'fradesii'*  
 (Escallonia)  
*Escallonia rubra*  
 (Escallonia)  
*Eugenia myrtifolia*  
 (Brush Cherry)  
*Euonymus alata*  
 (Euonymus, Winged)  
*Euonymus japonica*  
 (Euonymus, Evergreen)  
 (var. Golden, Silver King)  
*Euonymus kiautschovica*  
 (Spindle tree)  
*Euphorbia cotinifolia*  
 (Copper Plant, Caribbean)  
*Ficus repens*  
 (Fig, Creeping)  
*Forsythia viridissima bronxeniss*  
 (Forsythia, Greenstem)  
*Gardenia augusta*  
 (Gardenia) (var. Mystery)  
*Gardenia jasminoides*  
 (Gardenia) (var. Mystery, Radicans)  
 (Gardenia, Dwarf) (var. Veitchii)  
*Gelsemium sempervirens*  
 (Jessamine, Carolina)  
*Grewia occidentalis*  
 (Lavender, Star Plant)  
*Hakea proteacea*  
 (Hakea)  
*Hebe 'coed'*  
 (Veronica) (var. Coed)  
*Heteromeles arbutifolia*  
 (Toyon, California Holly)  
*Hibbertia scandens*  
 (Gold Vine, Guinea)  
*Hibiscus rosa-sinensis*  
 (Hibiscus, Chinese)  
*Hydrangea macrophylla*  
 (Hydrangea)  
*Ilex cornuta*  
 (Dwarf Burford Holly)  
 (var. Burfordii Nana)  
*Jasmine nudiflorum*  
 (Winter Jasmine)  
*Juniperus chinensis*  
 (Juniper, Chinese)  
 (var. Maneyi, Old Gold, Pfitzerana Sea Green,  
 Hetzii, Torulosa Nana, Gold Coast, Pfitzerana  
 aurea, Pfitzer, Golden Pfitzer, San Jose, San Jose  
 Variegated, Blue Sp.)  
*Juniperus conferta*  
 (Juniper, Shore) (var. Compacta)

**Shrubs (continued)**  
**Listed by common name**

Juniper, Creeping (var: Bluechip, Hughes, Plumosa, Prince of Wales, Webberi, Wiltonii, Bar Harbor, Andorra, Variegata, Youngstown Blue Rug)  
(*Juniperus horizontalis*)

Juniper, Ozark  
(*Juniperus* sp.)

Juniper, Rocky Mountain (var: Blue Heaven, Welchii, Wichita Blue, Medova, Moffet, Pyramidal Green, Springtime, Admiral)  
(*Juniperus scopulorum*)

Juniper, Savin  
(var: Skandia, Arcadia, Broadmoor, Buffalo, Pepin)  
(*Juniperus sabina*)

Juniper, Shore (var: Compacta)  
(*Juniperus conferta*)

Juniper, Tam (var: Tamariscifolia)  
(*Juniperus sabina*)

Lantana, Purple Trailing  
(*Lantana montevidensis*)

Laurustinus  
(*Viburnum tinus*)

Lemonade Berry  
(*Rhus integrifolia*)

Lilac, Common Purple  
(*Syringa vulgaris purpurea*)

Liriope, Green  
(*Liriope muscari*)

Liriope, Variegated  
(*Liriope muscari*)

Mickey Mouse Bush  
(*Ochna serrulata*)

Mirror Plant  
(*Coprosma repens*)

Mock Orange  
(*Pittosporum tobira*)

Mountain Lilac, Carmel Creeper  
(*Ceanothus griseus*)

Myrtle, Dwarf  
(*Myrtus communis compacta*)

Nandina, Heavenly Bamboo  
(*Nandina domestica*)

Nannyberry  
(*Viburnum lantago*)

Ninebark  
(*Physocarpus opulifolius*)

Ninebark (var: Aureus)  
(*Physocarpus opulifolius nanus*)

Oleander  
(*Nerium oleander*)

Orchid, rockrose  
(*Cistus purpureus*)

Oregon Grape  
(*Mahonia aquifolium*)

Osmanthus, Holly-leaf  
(*Osmanthus heterophyllum*)

Osmanthus, Sweet Olive  
(*Osmanthus fragrans*)

Palm, Natal  
(var: Green Carpet Tuttle)  
(*Carissa grandiflora*)

Pampas Grass  
(*Cortaderia selloana*)

Photinia  
(*Photinia* sp.)

Photinia, Fraser  
(*Photinia fraser*)

Pink Lady  
(*Rahioleis indica*)

**Listed by scientific name**

*Juniperus horizontalis*  
(Juniper, Creeping)  
(var: Bluechip, Hughes, Plumosa, Prince of Wales, Webberi, Wiltonii Bar Harbor, Andorra, Blue Rug, Youngstown, Variegata)

*Juniperus scopulorum*  
(Juniper, Rocky Mountain)  
(var: Blue Heaven, Welchii, Wichita Blue, Medova, Moffetii, Pyramidal Green, Springtime, Admiral)

*Juniperus sabina*  
(Juniper, Savin)  
(var: Skandia, Arcadia, Broadmoor, Buffalo, Pepin, Tamariscifolia)

*Juniperus virginiana*  
(Cedar, Eastern Red)  
(var: Pyramidiformus, Caneariti)

*Juniperus* sp.  
(Juniper, Ozark)

*Lagestromia indica*  
(Cape Myrtle)

*Lantana montevidensis*  
(Purple Lantana, Trailing)

*Leptospermum laevigatum*  
(Tea Tree, Australian)

*Leptospermum scoparium*  
(Tea Tree, New Zealand)  
(var: Rudy Glow)

*Leucophyllum frutescens*  
(Texas Ranger)

*Ligustrum indica*  
(Privet)

*Ligustrum japonicum*  
(Privet, Waxleaf, Japanese)

*Ligustrum lucidum*  
(Privet, Glossy) (var: Lake Tresca)

*Ligustrum texanum*  
(Privet, Texas)

*Liriope muscari*  
(Liriope, Green)

*Liriope muscari*  
(Liriope, Variegated)  
(var: Variegata)

*Lycianthes rantonnetii*

*Mahonia aquifolium*  
(Oregon Grape)

*Murraya paniculata*  
(Jasmine, Orange)

*Myrsine africana*  
(Boxwood, African)

*Myrtus communis compacta*  
(Dwarf Myrtle)

*Nandina domestica*  
(Nandina, Heavenly Bamboo)

*Nerium oleander*  
(Oleander)

*Ochna serrulata*  
(Mickey Mouse Bush)

*Osmanthus fragrans*  
(Osmanthus, Sweet Olive)

*Osmanthus heterophyllum*  
(Osmanthus, Holly-leaf)

*Pandorea rosea*  
(Pink Trumpet Vine)

*Rhormium tenax*  
(Flax, New Zealand)

*Photinia fraser*  
(Photinia, Fraser)

*Photinia* sp.  
(Photinia)

**Shrubs (continued)**  
**Listed by common name**

Pink Powder Puff  
(*Calliandra haematocephala*)  
Pittosporum, Variegated Japanese  
(*Pittosporum tobira variegata*)  
Plumbago, Cape  
(*Plumbago capensis*)  
Podocarpus, Yew  
(*Podocarpus macrophyllus*)  
Princess Flower  
(*Tibouchina urvilleana*)  
Privet  
(*Ligustrum indica*)  
Privet, Glossy (var: Lake Tresca)  
(*Ligustrum lucidum*)  
Privet, Japanese, Waxleaf  
(*Ligustrum japonicum*)  
Privet, Texas  
(*Ligustrum texanum*)  
Purple Hop Bush  
(*Dodonaea viscosa*)  
Pyracantha  
(*Pyracantha graberii*)  
Rhododendron - Azalea (var: *Hinocrimson*,  
*Hershey Red*, *Coral Blue*, *Hinodigiri*,  
*Christmas Cheer*, *Pink Ruffle*, *Formosa Flame*,  
*Delaware Valley White*, *New White*)  
(*Rhododendron* sp.)  
Sandcherry, Purpleleaf  
(*Prunus cistena*)  
Serviceberry, Allegheny  
(*Amelanchier laevis*)  
Serviceberry Saskatoon (var: *Regent*)  
(*Amelanchier alnifolia*)  
Silver King  
(*Euonymus japonica*)  
Sky Flower, Brazilian  
(*Duranta stenostachya*)  
Snowball Bush  
(*Viburnum opulus sterilis*)  
Spindle Tree  
(*Euonymus kiautschovica*)  
Spiraea  
(*Spiraea vanhouttei*)  
Spiraea (var: *Anthony Waterer*, *Froebellii*, *Goldflame*)  
(*Spiraea bumalda*)  
Spiraea (var: *Fairy Queen*)  
(*Spiraea trilobata*)  
Spiraea (var: *Snowbound*)  
(*Spiraea nipponica*)  
Star Plant, Lavender  
(*Grewia occidentalis*)  
Tea Tree, Australian  
(*Leptospermum laevigatum*)  
Tea Tree, New Zealand  
(var: *Red Glow*)  
(*Leptospermum scoparium*)  
Texas Ranger  
(*Leucophyllum frutescens*)  
Toyon, California Holly  
(*Heteromeles arbutifolia*)  
Trumpet Vine, Pink  
(*Pandorea rosea*)  
Veronica  
(*Hebe 'Coed'*)  
Viburnum, Japanese  
(*Viburnum japonicum*)  
Viburnum, Sandankwa  
(*Viburnum suspensum*)

**Listed by scientific name**

*Physocarpus opulifolius nanus*  
(Ninebark) (var: *Aureus*)  
*Physocarpus opulifolius*  
(Ninebark)  
*Pieris japonica*  
(Andromeda)  
*Pittosporum tobira*  
(Wheeler's Dwarf, variegated)  
(var: *Wheller*)  
*Pittosporum tobira variegata*  
(Pittosporum, Variegated Japanese)  
*Platycladus orientalis*  
(Arborvitae, Oriental)  
*Plumbago capensis*  
(Plumbago, Cape)  
*Podocarpus macrophyllus*  
(Yew, Podocarpus, Pine)  
*Prunus cistena*  
(Sandcherry, Purpleleaf)  
*Prunus tomentosa*  
(Cherry, Manchou, Nanking)  
*Pyracantha fortuneana*  
(Pyracantha, Firethorn)  
*Rhamnus frangula*  
(Buckthorn, Glossy, Alder)  
*Raphiolepis indica*  
(Pink Lady, Indian Hawthorn)  
*Rhododendron* sp.  
(Rhododendron - Azalea)  
(var: *Hinocrimson*, *Hershey Red*, *Coral Blue*,  
*Hinodigiri*, *Christmas Cheer*, *Pink Ruffle*, *Formosa*  
*Flame*, *Delaware Valley White*, *New White*)  
*R. x kosterianum*  
(Azalea, Mollis hybrid)  
*R. x kosterianum x R. priniphyllum*  
(Azalea, Northern lights hybrid)  
*Rhus integrifolia*  
(Lemonade Berry)  
*Ribes alpinum*  
(Currant, Alpine)  
*Rose banksiae*  
(Lady Banks' Rose)  
*Sarcococca ruscifolia*  
*Simmondsia chinensis*  
(Jojoba)  
*Spiraea bumalda*  
(Spiraea) (var: *Anthony Waterer*, *Froebellii*,  
*Goldflame*)  
*Spiraea nipponica tosaensis*  
(Spiraea) (var: *Snowbound*)  
*Spiraea trilobata*  
(Spiraea) (var: *Fairy Queen*)  
*Spiraea vanhouttei*  
(Spiraea)  
*Syringa vulgaris purpurea*  
(Lilac, Common Purple)  
*Taxus cuspidata vigatum*  
(Yew)  
*Tecoma stans*  
(Yellow Bells, Yellow Trumpet Flower)  
*Tecomaria capensis*  
(Honeysuckle, Cape)  
*Ternstroemia gymnanthera*  
(Ternstroemia)  
*Thevetia peruviana*  
(Oleander, Yellow)  
*Tibouchina urvilleana*  
(Princess Flower)

**Shrubs (continued)**  
**Listed by common name**

- Wayfaring Tree  
(*Viburnum lantanoides*)
- Weeping Fig, Exotica  
(*Ficus benjamina*)
- Wheeler's Dwarf, Variegated  
(var: Wheeler)  
(*Pittosporum tobira*)
- Yellow Bells  
(*Tecoma stans*)
- Yesterday-Today-and-Tomorrow  
(*Brunfelsia calycina*)
- Yew  
(*Taxus cuspidata vigatum*)

**Listed by scientific name**

- Trachelospermum asiaticum*  
(Jasmine, Asiatic)
- Trachelospermum jasminoides*  
(Jasmine, Star)
- Viburnum dentatum*  
(Arrowwood, Sputhern)
- Viburnum japonicum*  
(Viburnum, Japanese)
- Viburnum lentago*  
(Nannyberry)
- Viburnum lantanoides*  
(Wayfaring Tree)
- Viburnum opulus aureum*  
(Cranberry Bush, Golden)
- Viburnum opulus sterilis*  
(Snowball Bush)
- Viburnum suspensum*  
(Viburnum, Sandankwa)
- Viburnum tinus*  
(Laurustinus)
- Viburnum trilobum*  
(Cranberry Bush, American)

**Ornamentals, Bedding plants**  
**Listed by common name**

- Allysum  
(*Alyssum* sp.)
- Asparagus, Myers (var: Meyeri)  
(*Asparagus densiflorus*)
- Asparagus, Sprenger (var: Sprengeri)  
(*Asparagus densiflorus*)
- Aster, New York  
(*Aster novi-belgii*)
- Aster, Stokes (var: Blue, White)  
(*Stokesia cyanae*)
- Baby's Breath (var: Bristo Fairy)  
(*Gypsophila paniculata*)
- Begonia  
(*Begonia semperflorens*)
- Bellflower, Tussock (var: Canterbury Bells)  
(*Campanula carpatia*)
- Bittersweet, American  
(*Calatrus scandens*)
- Black-eyed Susan (var: Goldilocks)  
(*Rudbeckia hirta*)
- Bleeding Heart  
(*Dicentra spectabilis*)
- Butterfly Weed  
(*Asclepias tuberosa*)
- Bower Vine  
(*Pandorea jasminoides*)
- Cactus, Barrel  
(*Echinocactus* sp.)
- Candytuft  
(*Iberis sempervirens*)  
(*Iberis amara*)
- Canna  
(*Canna* sp.)
- Cassia, Feathery  
(*Cassia artemisioides*)
- Chrysanthemum, Marguarite  
(*Chrysanthemum frutescens*)
- Chrysanthemum  
(*Chrysanthemum indicum*)
- Cockscomb  
(*Celosia argentea*)  
(Canna)
- Coleus  
(*Coleus blumei*)

**Listed by common name**

- Acorus gramineus*  
(Sweet Grass)
- Achillea Millefolium*  
(Yarrow (var: Cerise Queen))
- Achillea taygetea* v.  
(Yarrow, Debutante)
- Agapanthus africanus*  
(Peter Pan, Lily of the Nile)
- Allium tuberosum*  
(Chives, Chinese, Garlic, Oriental)
- Alyssum* sp.  
(Allysum)
- Antirrhinum majus*  
(Snapdragon)
- Arenaria verna*  
(Moss Sandwort)
- Arisaemia pusillum*  
(Jack-in-the-Pulpit)
- Armeria maritima*  
(Sea Pinks, Thrift)
- Asclepias tuberosa*  
(Butterfly Weed)
- Asparagus densiflorus Sprengeri*  
(Asparagus, Sprenger)
- Asparagus densiflorus*  
(Myers Asparagus) (var: meyeri)
- Aster novi-belgii*  
(New York Aster)
- Begonia semperflorens*  
(Begonia)
- Bougainvillea* sp.  
(Raspberry Ice)
- Calatrus scandens*  
(Bittersweet, American)
- Campanula carpatia*  
(Bellflower, Tussock (var: Canterbury Bells))
- Canna* sp.  
(Canna)
- Capsicum* sp.  
(Pepper, Ornamental)
- Cassia artemisioides*  
(Cassia, Feathery)
- Catharanthus roseus*  
(Periwinkle, Madagascar)

**Ornamentals, Bedding plants (continued)**  
**Listed by common name**

Coneflower, Purple (var: Gloriosa Dairy)  
(*Echinacea purpurea*)  
Coralbells  
(*Heuchera sanguinea*)  
Coreopsis (var: Sunray)  
(*Coreopsis lanceolata*)  
Cup of Gold Vine  
(*Solandra maxima*)  
Daffodil  
(*Narcissus spp.*)  
Dahlia  
(*Dahlia pinnata*)  
Daisy Bush  
(*Euryops pectinatus*)  
Daisy Bush, Blue  
(*Felicia amellioides*)  
Daisy, Shasta (var: Alaska)  
(*Chrysanthemum maximum*)  
Daylily  
(*Hemerocallis hybrids*)  
Dianthus  
(*Dianthus deltooides*)  
Dragonhead, False  
(*Physostegia virginiana*)  
Dusty Miller  
(*Centaurea cineraria*)  
Fern, Sprenger Asparagus  
(*Asparagus densiflorus Sprengerii*)  
Fescue, Blue  
(*Festuca ovina*)  
Flowering tobacco  
(*Nicotiana sp.*)  
Fountain Grass, Red  
(*Pennisetum setaceum*)  
Gazania  
(*Gazania ringens leucolaena*)  
Gazania  
(*Gazania sp.*)  
Geranium  
(*Geranium sp.*)  
Geranium, Martha Washington  
(*Pelargonium domesticum*)  
Gerbera Daisy  
(*Gerbera jamesonii*)  
Geum (var: Lady Strathedon, Mrs. Bradshaw,  
Mrs. Bradshaw Improved)  
(*Geum quellyon*)  
Gladiolus  
(*Gladiolus sp.*)  
Heather, False  
(*Cuphea hyssopifolia*)  
Honeysuckle, Amar  
(*Lonicera maachii*)  
Honeysuckle, Fly  
(var: Emerald Mound, Clavey's Dwarf)  
(*Lonicera xylosteum*)  
Honeysuckle, Japanese  
(*Lonicera japonica*)  
Honeysuckle, Morrow  
(*Lonicera morrowii*)  
Honeysuckle, Tatarian (var: Zabeli)  
(*Lonicera tatarica*)  
Hopseed Bush, Purple  
(var Purpurea)  
(*Dodonaea viscosa*)  
Impatiens  
(*Impatiens sp.*)  
Iris  
(*Iris sp.*)

**Listed by scientific name**

*Ceanothus griseus*  
(Lilac, Mountain)  
*Cepsoia argentea*  
(Cockscomb)  
*Centaurea cineraria*  
(Dusty Miller)  
*Chrysanthemum frutescens*  
(Chrysanthemum, Marguerite)  
*Chrysanthemum indicum*  
(Chrysanthemum)  
*Chrysanthemum maximum*  
(Daisy, Shasta)  
*Cissus rhombifolia*  
(Ivy, Grape)  
(var: Ellen Danica)  
*Clytostoma callistegioides*  
(Trumpet Vine, Lavender)  
*Coleus blumei*  
(Coleus)  
*Convallaria majalis*  
(Lily-of-the-Valley)  
*Coprosma baueri*  
(Mirror Plant)  
*Coprosma repens*  
(Mirror Plant, Variegated)  
*Coreopsis lanceolata*  
(Coreopsis (var: Sunray))  
*Crassula argentea*  
(Jade Plant)  
*Cuphea hyssopifolia*  
(Heather, False)  
*Dahlia pinnata*  
(Dahlia)  
*Dianthus barbatus*  
(Sweet William)  
*Dianthus deltooides*  
(Dianthus)  
*Dicentra spectabilis*  
(Bleeding Heart)  
*Dietes bicolor*  
(Iris, African)  
*Distictis buccinatoria*  
(Trumpet Vine, Blood Red)  
*Dodonaea viscosa*  
(Hopseed Bush)  
(var: Purpurea)  
*Echinocactus sp.*  
(Cactus, Barrel)  
*Echinacea purpurea*  
(Coneflower, Purple (var: Gloriosa Dairy))  
*Euryops pectinatus*  
(Daisy Bush)  
*Felicia amellioides*  
(Daisy Bush, Blue)  
*Festuca ovina glauca*  
(Fescue, Blue)  
*Gazania sp.*  
(Gazania)  
*Gazania ringens leucolaena*  
(Gazania)  
*Geranium sp.*  
(Geranium)  
*Gerbera jamesonii*  
(Daisy, Gerbera, Transvaal)  
*Geum quellyon*  
(Geum (var: Lady Strathedon, Mrs. Bradshaw,  
Mrs. Bradshaw Improved))  
*Gladiolus sp.*  
(Gladiolus)

**Ornamentals, Bedding plants (continued)**

**Listed by common name**

Iris, African  
(*Dietes bicolor*)  
Ivy, Grape  
(var: *Ellen Danica*)  
(*Cissus rhombifolia*)  
Jack-in-the-Pulpit  
(*Arisaema pusillum*)  
Mrs. Bradshaw Improved))  
Jade Plant  
(*Crassula argentea*)  
Jasmine, Madagascar  
(*Stephanotis floribunda*)  
Lamb's Ear  
(*Stachys lanata*)  
Lavender, English  
(*Lavandula vera*)  
Lavender, French  
(*Lavandula dentata*)  
Lavender, Cotton  
(*Santolina chamaecyparissus*)  
Lilac, Chinese  
(*Syringa chinensis*)  
Lilac, Common Purple  
(var: *Charles Joly*, *Ludwig Spaeth*, *Jay Tree*)  
(*Syringa vulgaris purpurpa*)  
Lilac, Meyer (var: *Palibin*)  
(*Syringa* sp.)  
Lilac, Korean  
(var: *Miss Kim*)  
(*Syringa patula*)  
Lilac, Mountain  
(*Ceanothus griseus*)  
Lily-of-the-Nile, Peter Pan  
(*Agapanthus africanus*)  
Lily-of-the-Valley  
(*Convallaria majalis*)  
Lobelia  
(*Lobelia erinus*)  
Marigold  
(*Tagetes* sp.)  
Mirror Plant  
(*Coprosma baueri*)  
Mirror Plant, Variegated  
(*Coprosma repens*)  
Moneywort, Creeping Jenny  
(*Lysimachia nummularia*)  
Moss, Rose  
(*Portulaca grandiflora*)  
Moss, Sandwort  
(*Arenaria verna*)  
Pansy, Johnny-Jump-Up  
(*Viola tricolor*)  
Pepper, Ornamental  
(*Capsicum* sp.)  
Periwinkle, Madagascar  
(*Catharanthus roseus*)  
Periwinkle  
(*Vinca minor*)  
Petunia  
(*Petunia* sp.)  
Phlox, Perennial  
(*Phlox paniculata*)  
Plantain Lily  
(*Hosta* sp.)  
Purple Loosestrife  
(var: *Morden's Gleam*)  
(*Lythrum virgatum*)

**Listed by scientific name**

*Gypsophila paniculata*  
(Baby's Breath (var: *Bristo Fairy*))  
*Hardenbergia violacea*  
*Heimerocallis Hybrids*  
(Daylily)  
*Heuchera sanguinea*  
(Coralbells)  
*Hosta* sp.  
(Lily, Plantain)  
*Iberis amara*  
(Candytuft)  
*Iberis sempervirens*  
(Candytuft)  
*Impatiens* sp.  
(Impatiens)  
*Iris* sp.  
(Iris)  
*Justicia brandegeana*  
(Shrimp Plant)  
*Lavandula dentata*  
(Lavender, French)  
*Lavandula vera*  
(Lavender, English)  
*Limonium perezii*  
(Statice, Perennial)  
*Lobelia erinus*  
(Lobelia)  
*Lonicera japonica*  
(Honeysuckle, Japanese)  
*Lonicera maackii*  
(Honeysuckle, Amar)  
*Lonicera morrowii*  
(Honeysuckle, Morrow)  
*Lonicera tatarica*  
(Honeysuckle, Tatarian) (var: *Zabeli*)  
*Lonicera xylosteum*  
(Honeysuckle, Fly)  
(var: *Emerald Mound*, *Clavey's Dwarf*)  
*Lysimachia nummularia*  
(Moneywort, Creeping Jenny)  
*Lythrum virgatum*  
(Loosestrife, Purple)  
(var: *Morden's Gleam*)  
*Macfadyena unguis-cati*  
(Yellow Trumpet)  
*Mattiola incana*  
(Stock)  
*Narcissus* spp.  
(Daffodil)  
*Nicotiana* sp.  
(Tobacco, Flowering)  
*Pandorea jasminoides*  
(Vine, Bower)  
*Pandorea rosea*  
(Pink Trumpet Vine)  
*Pelargonium domesticum*  
(Geranium, Martha Washington)  
*Pennisetum setaceum*  
(Fountain Grass, Red)  
*Petunia* sp.  
(Petunia)  
*Phlox paniculata*  
(Phlox, Perennial)  
*Portulaca grandiflora*  
(Moss Rose)  
*Physostegia virginiana*  
(Dragonhead, False)



## Ornamentals, Bedding plants (continued)

### Listed by common name

Raspberry Ice  
(*Bougainvillea* sp.)  
Sage  
(*Salvia greggii*)  
Sea Pinks, Thrift  
(*Armeria maritima*)  
Sedum, Stonecrop  
(*Sedum x rubrotinctum*)  
(Lavender cotton)  
Shrimp Plant  
(*Justicia brandegeana*)  
Sky Flower, Brazilian  
(*Duranta stenostachya*)  
Snail Vine  
(*Vigna caracalla*)  
Snapdragon  
(*Antirrhinum majus*)  
Speedwell, Spike  
(*Veronica spicata*)  
Statice, Perennial  
(*Limonium perezii*)  
Stock  
(*Mattiola incana*)  
Sweet Grass  
(*Acorus gramineus*)  
Sweet William  
(*Dianthus barbatus*)  
Transvaal Daisy  
(*Gerbera jamesonii*)  
Trumpet Vine, Blood red  
(*Distictis buccinatoria*)  
Trumpet Vine, Lavender  
(*Clytostoma callistegioides*)  
Trumpet Vine, Pink  
(*Pandorea rosea*)  
Tulip  
(*Tulipa* spp.)  
Verbena  
(*Verbena* sp.)  
Wandering Jew  
(*Tradescantia* sp.)  
Wisteria  
(*Wisteria sinensis*)  
Yarrow (var: Cerise Queen)  
(*Achillea millefolium*)  
Yarrow, Debutante  
(*Achillea taygetea* v.)  
Yellow Trumpet  
(*Macfadyena unguis-cati*)  
Zinnia  
(*Zinnia elegans*)

### Ground covers

#### Listed by common name

Aaron's Beard  
(*Hypericum calycinum*)  
Aptenia (var: Red Apple)  
(*Aptenia cordifolia*)  
Bergenia, Winter-blooming  
(*Bergenia crassifolia*)  
Bugleweed  
(*Ajuga reptans*)  
Capeweed  
(*Arctotheca calendula*)  
Carpathian, Harebell  
(*Campanula carpatica*)

#### Listed by scientific name

*Rudbeckia hirta*  
(Black-eyed Susan (var: Goldilocks))  
*Salvia greggii*  
(Sage)  
*Santolina chamaecyparissus*  
*Sedum x rubrotinctum*  
(Sedum, Stonedrop)  
*Solanandra maxima*  
(Cup of Gold Vine)  
*Stachys lanata*  
(Lamb's Ear)  
*Stephanotis floribunda*  
(Jasmine, Madagascar)  
*Stokesia cyanaea*  
(Aster, Stokes (var: Blue, White))  
*Syringa chinensis*  
(Lilac, Chinese)  
*Syringa patula*  
(Lilac, Korean)  
(var: Miss Kim)  
*Syringa* sp.  
(Lilac, Meyer)  
(var: Palibin)  
*Syringa vulgaris purpurpa* (Lilac, Common Purple)  
(var: Charles Joly, Ludwig Spaeth, Jay Tree)  
*Tagetes* sp.  
(Marigold)  
*Tulipa* spp.  
(Tulip)  
*Tradescantia* sp.  
(Wandering Jew)  
*Verbena* sp.  
(Verbena)  
*Veronica spicata*  
(Spike Speedwell)  
*Vinca minor*  
(Periwinkle)  
*Vigna caracalla*  
(Snail Vine)  
*Viola tricolor*  
(Pansy, Johnny-Jump-Up)  
*Wisteria sinensis*  
(Wisteria)  
*Zinnia elegans*  
(Zinnia)

#### Listed by scientific name

*Ajuga reptans*  
(Bugleweed)  
*Aptenia cordifolia*  
(Aptenia) (var: Red Apple)  
*Arctotheca calendula*  
(Capeweed)  
*Baccharis pilularis*  
(Coyote Brush) (var: Twin Peaks)  
*Bergenia crassifolia*  
(Bergenia, Winter-blooming)  
*Calocephalus brownii*  
(Cushion bush)

**Ground covers (continued)**  
**Listed by common name**

Cinquefoil, Spring  
(*Potentilla tabernaemontanii*)  
Coyote brush (var. Twin Peaks)  
(*Baccharis pilularis*)  
Crownvetch  
(*Coronilla varia*)  
Cushion Bush  
(*Calocephalus brownii*)  
Daisy, Trailing African, Freeway  
(*Osteospermum*)  
Daisy, White African  
(*Osteospermum fruticosum alba*)  
Gazania, Trailing  
(*Gazania regens leucolaena*)  
Green Carpet  
(*Herniaria glabra*)  
Ivy, Algerian  
(*Hedera canariensis*)  
Ivy, Boston  
(*Parthenocissus tricuspidata*)  
Ivy, English  
(*Hedera helix*) (var. California)  
Ivy, Grape  
(var. Ellen Danica)  
(*Cissus rhombifolia*)  
Ivy, Hahn's (var. Hahnii)  
(*Hedera helix*)  
Lantana, Lavender  
(*Lantana montevidensis*)  
Lily-turf, Big Blue  
(*Liriope muscari*)  
Lippia  
(*Phyla nodiflora*)  
Mondo Grass  
(*Ophiopogon japonicus*)  
Myoporum (var. Prostratum)  
(*Myoporum parvifolium*)  
Pachysandra  
(*Pachysandra terminalis*)  
Periwinkle  
(*Vinca major*)  
Plumbago, Dwarf  
(*Ceratostigma plumbaginoides*)  
Pork and Beans  
(*Sedum rubrotinctum*)  
Rosea Ice Plant  
(*Drosanthemum floribundum*)  
Rosemary, Dwarf (var. Prostratus)  
(*Rosmarinus officinalis*)  
Rupture Wort  
(*Herniaria glabra*)  
St. Johnswort, Creeping  
(*Hypericum calycinum*)  
Stonecrop, Sedum  
(*Sedum rubrotinctum*)  
Verbena  
(*Verbena officinalis*)  
Verbena, Blue  
(*Verbena peruviana*)

**Listed by scientific name**

*Campanula carpatia*  
(Harebell, Carpathian)  
*Ceratostigma plumbaginoides*  
(Plumbago, Dwarf)  
*Cissus rhombifolia*  
(Ivy, Grape) (var. Ellen Danica)  
*Coronilla varia*  
(Crownvetch)  
*Drosanthemum floribundum*  
(Rosea Ice Plant)  
*Gazania regens leucolaena*  
(Gazania, Trailing)  
*Hedera helix*  
(Ivy, English) (var. California)  
(Hahn's Ivy) (var. Hahnii)  
*Herniaria glabra*  
(Green Carpet, Rupture Wort)  
*Hypericum calycinum*  
(Creeping St. Johnswort, Aaron's Beard)  
*Juniperus scopulorum*  
*Lantana montevidensis*  
(Lavender, Lantana)  
*Liriope muscari*  
(Lily-turf, Big Blue)  
*Myoporum parvifolium*  
(Myoporum) (var. Prostratum)  
*Ophiopogon japonicus*  
(Mondo Grass)  
*Osteospermum fruticosum*  
(Daisy, Trailing African, Freeway)  
*Osteospermum fruticosum alba*  
(Daisy, White African)  
*Pachysandra terminalis*  
(Pachysandra)  
*Parthenocissus tricuspidata*  
(Ivy, Boston)  
*Phyla nodiflora*  
(Lippia)  
*Potentilla cinerea*  
*Potentilla tabernaemontanii*  
(Cinquefoil, Spring)  
*Rosmarinus officinalis*  
(Dwarf Rosemary) (var. Prostratus)  
*Sedum rubrotinctum*  
(Stonecrop, Sedum, Pork & Beans)  
*Verbena officinalis*  
(Verbena)  
*Verbena peruviana*  
(Blue Verbena)  
*Vinca major*  
(Periwinkle, Myrtle)

**Nonbearing Food Crops and  
Nursery Liners**

Almonds  
Apples  
Apricots  
Asparagus  
Avocados  
Blackberries  
Blueberries  
Cherries  
Crabapples  
Cranberries  
Dates  
Figs

Grapes  
Grapefruits  
Lemons  
Limes  
Macadamias  
Nectarines  
Olives  
Oranges  
Peaches  
Peanuts, Perennial\*  
Pears  
Pecans  
Pistachios  
Plums

Pomegranates  
Prunes  
Raspberries  
Tangelos  
Tangerines  
Walnuts

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Do not apply to nonbearing food  
crops within 1 year of harvest.

\* Not approved in California.

In limited testing with the following plants, some unacceptable phytotoxicity has been found, though usually occurring at application rates above those recommended on the product label.

Listed by Common Name	Listed by Scientific Name
<b>Trees</b>	
Red Oak	<i>Quercus rubra</i>
White Oak	<i>Quercus alba</i>
<b>Shrubs</b>	
Azalea (var Snow)	<i>Rhododendron sp.</i>
Potentilla	<i>Potentilla fruticosa</i>
(var Jackmanni, K. VanDyke)	<i>Potentilla verna</i>
Privet, Japanese	<i>Ligustrum japonica</i>
<b>Ornamental</b>	
Snow-in-summer	<i>Cerastium tomentosum</i>

Common Name	Scientific Name
African daisy	<i>Dimorphotheca aurantiaca</i>
Baby blue eyes	<i>Nemophila insignis</i>
Baby snapdragon	<i>Linaria macrocanna</i>
Baby's breath	<i>Gypsophila muralis</i>
Bachelor button	<i>Centaurea cyanus</i>
Bird's eyes	<i>Gilia tricolor</i>
Black eyed Susan	<i>Rudbeckia hirta</i>
Blanketflower	<i>Gaillardia aristata</i>
Blue Fescue	<i>Festuca ovina glauca</i>
Blue flax	<i>Linum lewisii</i>
Butterflyweed	<i>Asclepias tuberosa</i>
Calendula	<i>Calendula officinalis</i>
California poppy	<i>Eschscholzia californica</i>
Calliopsis	<i>Coreopsis tinctoria</i>
Candytuft	<i>Iberis sempervirens</i>
Carnation	<i>Dianthus</i>
Catchfly	<i>Silene armeria</i>
Chicory	<i>Chicory intybus</i>
Chinese houses	<i>Collinsia heterophylla</i>
Columbine	<i>Aquilegia spp.</i>
Corn poppy	<i>Papaver rhoeas</i>
Cornflower	<i>Centaurea cyanus</i>
Cosmos	<i>Cosmos bipinnatus</i>
Creeping daisy	
Dames rocket	<i>Hesperis matronalis</i>
Drummond phlox	<i>Phlox drummondii</i>
Dwarf primrose	<i>Oenothera sp.</i>
Firewheel	<i>Gaillardia pulchella</i>
Five spot cornflower	<i>Centaurea sp.</i>
Foxglove	<i>Digitalis purpurea</i>
Godetia	<i>Clarkia amoena</i>
Grayhead coneflower	<i>Echinacea pallida</i>
Hard fescue	<i>Festuca longifolium</i>
Indian blanket	<i>Gaillardia pulchella</i>
Indian paintbrush	<i>Castilleja coccinea</i>
Jewels of Opar	<i>Talinum paniculatum</i>
Johnny-jump-up	<i>Viola pedata</i>
Lance-leaved coreopsis	<i>Coreopsis lanceolata</i>
Lemon mint	<i>Monarda citriodora</i>
Liatris	<i>Liatris spicata</i>
Lupine	<i>Lupinus spp.</i>
Moss verberna	<i>Verbena tenuisecta</i>
New England aster	<i>Aster novi-anglae</i>
Nodding catchfly pink	<i>Silene sp.</i>
Oxeye daisy	<i>Chrysanthemum leucanthemum</i>
Painted daisy	<i>Chrysanthemum carinatum</i>
Perennial lupine	<i>Lupinus perennis</i>
Plains coreopsis	<i>Coreopsis tinctoria</i>
Poor man's weather glass	
Prairie aster	<i>Machaeranthera tanacetifolia</i>
Purple coneflower	<i>Echinacea purpurea</i>
Purpleknot toadflax	<i>Linaria sp.</i>
Queen Anne's lace	<i>Daucus carota</i>
Red ribbons	<i>Clarkia concinna</i>
Rocket larkspur	<i>Delphinium ajacis</i>
Sainfoin	<i>Conobrychis vicifolia</i>
Sand bluebonnet	<i>Lupinus subcarnosus</i>
Scarlet flax	<i>Linum rubrum</i>
Showy primrose	<i>Oenothera speciosa</i>
Siberian wallflower	<i>Cheiranthus spp.</i>
Spurred snapdragon	<i>Linaria macrocanna</i>
Stock	<i>Matthiola maritima</i>
Sulfur cosmos	<i>Cosmos sulfureus</i>
Sweet alyssum	<i>Lobularia maritima</i>
Sweet William	<i>Dianthus barbatus</i>
Texas bluebonnet	<i>Lupinus texensis</i>
Tickseed	<i>Coreopsis lanceolata</i>
Tidy tips	<i>Layia platyglossa</i>
Virginian stock	<i>Malcolmia maritima</i>
Wallflower	<i>Cheiranthus allionii</i>
White yarrow	<i>Achillea millefolium</i>

The following are scientific names for the weeds listed in this label.

## Grasses

Common Name	Scientific Name
Bahiagrass	<i>Paspalum notatum</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bentgrass, Highland/Colonial	<i>Agrostis tenuis</i>
Bermudagrass	<i>Cynodon dactylon</i>
Bluegrass, Annual	<i>Poa annua</i>
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>
Brome, Downy	<i>Bromus tectorum</i>
Centipedegrass	<i>Eremochloa ophiuroides</i>
Crabgrass, Large	<i>Digitaria sanguinalis</i>
, Smooth	<i>Digitaria ischaemum</i>
Cupgrass, Woolly	<i>Eriochloa villosa</i>
Fescue, Fine	<i>Festuca sp.</i>
, Chewings	<i>Festuca rubra</i>
, Creeping Red	<i>Festuca rubra</i>
, Hard	<i>Festuca longifolia</i>
, Rattail	<i>Festuca myuros</i>
, Sheep	<i>Festuca ovina</i>
, Tall	<i>Festuca arundinacea</i>
Foxtails, Giant	<i>Setaria faberi</i>
, Green	<i>Setaria viridis</i>
, Yellow	<i>Setaria glauca</i>
Goosegrass	<i>Eleusine indica</i>
Johnsongrass	<i>Sorghum halepense</i>
Junglerice	<i>Echinochloa colonum</i>
Lovegrass	<i>Eragrostis ciliaris</i>
Orchardgrass	<i>Dactylis glomerata</i>
Pigeon grass (See Foxtails)	
Panicum, Browntop	<i>Panicum fasciculatum</i>
, Fall	<i>Panicum dichotomiflorum</i>
, Texas	<i>Panicum texanum</i>
Quackgrass	<i>Agropyron repens</i>
Red Sprangletop	<i>Leptochloa filiformis</i>
Ryegrass, Annual	<i>Lolium multiflorum</i>
Sandbur, Field	<i>Cenchrus incertus</i>
Shattercane/Wildcane	<i>Sorghum bicolor</i>
Torpedograss	<i>Panicum repens</i>
Velvetgrass, German	<i>Holcus mollis</i>
Volunteer Barley	<i>Hordeum vulgare</i>
, Oats	<i>Avena sativa</i>
, Rye	<i>Secale cereale</i>
, Wheat	<i>Tritium aestivum</i>
Watergrass (See Barnyardgrass)	
Wild Oats	<i>Avena fatua</i>
Wild Proso Millet	<i>Panicum miliaceum</i>
Wiregrass (See Bermudagrass)	
Wirestem Muhly	<i>Muhlenbergia frondosa</i>
Witchgrass	<i>Panicum capillare</i>

## Conditions of Sale and Warranty

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

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the

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# BASF