

Vantage

herbicide

Active Ingredient:

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

Inert Ingredients:..... 87.0%

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

*Equivalent to 1.0 pound of sethoxydim per gallon

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

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.

PRECAUTIONARY STATEMENTS**HAZARDS TO HUMANS AND DOMESTIC ANIMALS****CAUTION**

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemically 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

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Manufactured By:
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Wash thoroughly with soap and water after handling. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not re-use them. 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 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 washwaters.

ENDANGERED SPECIES CONCERNS

The use of any pesticide in a manner 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 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.

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), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- 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 greenhouses. 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 Storage: Do not store below 32°F or above 100°F. Store in a dry place away from heat or open flame. Avoid contamination of feed or foodstuffs.

Pesticide Disposal: Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal:

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

In Case of Emergency

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact:

CHEMTREC 1-800-424-9300 (transportation and spills)
Poison Control Center 1-800-900-4044 (human health)
ASPCA 1-800-345-4735 (animal health)

I. GENERAL INFORMATION

Vantage herbicide is a selective, broad spectrum, postemergence herbicide for control of annual and perennial grass weeds in turf, ornamentals, nonfood, and noncrop sites listed on this label. **Vantage** does not control sedges or broadleaf weeds. Essentially, all grass crops, such as sorghum, corn, small grains, and rice, as well as ornamental grasses, such as turf, are susceptible to **Vantage**. 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. A reduction in grass competition may make certain broadleaf weeds appear more prominent or may allow new weeds to germinate.

Vantage may be used in or around the following sites:

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

MODE OF ACTION

Vantage rapidly enters the targeted grass weed through its foliage and translocates throughout the plant. The effects range from slowing or stopping growth (generally within 2 days), to foliage reddening and leaf tip burn. Subsequently, foliage burnback occurs. These symptoms will generally be observed within 3 weeks depending on environmental conditions.

CROP TOLERANCE

All labeled crops are tolerant to **Vantage** at all stages of growth. Leaf speckling may occur, but plants generally outgrow this condition within 10 days. New growth is normal and crop vigor is not reduced.

Notice to user: Due to variability within species, and in application techniques and equipment, and the number of tank mix combinations, 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, wildflowers, Christmas trees, turf and other non-food 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 under the conditions expected to be encountered on a small test area. Any adverse effects should be visible within 7 days.

Herbicide Resistance

Repeated use of **Vantage** (or similar postemergence grass herbicides with the same mode of action) may lead to the selection of naturally occurring biotypes with resistance to these products. If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. Consult your local representative or agricultural advisor for assistance.

Irrigation

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

Coverage

Apply **Vantage** to the foliage of grasses on a spray-to-wet basis uniformly and completely. Dense leaf canopies shelter smaller grassy weeds and can prevent adequate spray coverage. Do not spray to the point of runoff.

Cultivation/Mowing

If cultivation is an option, do not cultivate during the time between 5 days before and 7 days after applying **Vantage**. Cultivating 7-14 days after treatment may help provide season-long control of perennial grasses. 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. Grass weeds that have been mowed or have regrown from mowed stubble may be controlled poorly. Repeat application if new germination or regrowth occurs.

Cleaning Spray Equipment

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

II. APPLICATION INSTRUCTIONS

Applications can be made to actively growing grassy weeds as aerial, broadcast, band, or spot spray applications at the rates and growth stages listed in **Tables 1** and **2**, unless instructed differently in section **VII**.

Crop-Specific Information. The most effective control will result from making postemergent applications of **Vantage** early, when grassy weeds are small. Delaying application permits grassy 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.

Ground Application (Broadcast)

Water Volume: Use 5-50 gallons of spray solution per acre (1 -10 pints per 1,000 square feet).

Spray Pressure: Use 30-60 psi (measured at the boom, not at the pump or in the line). When crop and grass weed foliage is dense, use a minimum of 20 gallons (3.67 pints per 1,000 square feet) of water and 60 psi.

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. Refer to the nozzle manufacturer's directions for recommended height.

Table 1. Application Rates for Grass Control

Grass	Vantage (Rate)	
	Grass up to 6" height	Grass up to 12" height
Bahiagrass ¹ Barnyardgrass Bentgrass, Colonial , Highland Broadleaf Signalgrass Crabgrass, Large ¹ , Smooth ¹ Downy Brome ⁴ German Velvetgrass ¹ Goosegrass ^{1,2} Johnsongrass, Rhizome , Seedling Junglerice Lovegrass Orchardgrass, Seedling Panicum, Browntop , Fall , Texas Quackgrass Ryegrass, Annual ³ Sandbur, Field Shaftercane/Wildcane Sprangletop, Red* Tall Fescue, Seedling Volunteer, Barley , Oats , Rye , Wheat Wild Oats Wild Proso Millet Wirestem Muhly Witchgrass Wooly 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
¹ up to 4" ² In Seedling Centipedegrass and fine fescue, use 1.5 pints (0.5 fluid ounces) ³ up to 8" ⁴ up to 6" *Not recommended in CA, AZ, or Western NM		

Table 2. Spot Treatment Application Rates

Grass (see Appendix for the complete list of grasses controlled)	Concentration of Vantage in Spray Solution
Annual grasses up to 6" height	1.5%
Annual grasses up to 12" height	2.25%
Perennial grasses	2.25% ¹
¹ Use 1.5% for wirestem muhly.	

Table 3. Spot Treatment Dilution

Spray Solution Volume	Amount of Vantage to be Added	
	1.5% v/v	2.25% v/v
1 gallon	2 fl. oz.	3 fl. oz.
3 gallons	6 fl. oz.	9 fl. oz.
5 gallons	9.5 fl. oz.	14.5 fl. oz.
¹ Use 1.5% for wirestem muhly.		

Do not use selective application equipment such as recirculating sprayers or wiper applicators.

Spot or Small Area Application

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 herbicide** in water according to **Table 2**. Do not make spot treatments in addition to broadcast or band treatment.

III. ADDITIVES

No additives or adjuvants are recommended for use with **Vantage herbicide**.

Compatibility Test for Tank Mix Components

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

- 1) **Water:** - For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2) **Products in PVA bags:** - Cut an opening in the water-soluble PVA bag just large enough to use a teaspoon for measuring purposes. Use the opened water-soluble PVA bag first when preparing spray solution. Cap the jar and invert 10 cycles.
- 3) **Water-dispersible products:** - (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions) Cap the jar and invert 10 cycles.
- 4) **Water-soluble products:** - Cap the jar and invert 10 cycles.
- 5) **Emulsifiable concentrates:** - (**Vantage**) Cap the jar and invert 10 cycles.
- 6) **Water-soluble additives:** - Cap the jar and invert 10 cycles.
- 7) Let the solution stand for 15 minutes.
- 8) **Evaluate** the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

IV. MIXING ORDER

- 1) **Water:** Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2) **Products in PVA bags:** Rinse the tank thoroughly before adding any material in PVA bags as boron residue will prevent adequate mixing. Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all watersoluble PVA bags have fully dissolved and is evenly mixed in the spray tank before continuing.
- 3) **Water-dispersible products:** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
- 4) **Water-soluble products**
- 5) **Emulsifiable concentrates (Vantage)**
- 6) **Water-soluble additives**
- 7) **Remaining quantity water**

Maintain constant agitation during application.

V. Tank Mixing Application

Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. Refer to section **VII. CropSpecific Information** for more details.

The most restrictive labeling applies to tank mixes. Separate applications should be made if all target grassy weeds are not at the correct growth stage for treatment at the same time.

Tank mixing **Vantage** with some postemergence broadleaf herbicides has shown some reduction or failure to control some grassy weeds that would otherwise be controlled and therefore may require a higher rate of **Vantage**. However, do not exceed the maximum rate per application as listed in **Table 6**. If regrowth occurs or an additional flush of new grasses emerges, reapply **Vantage** according to recommended rates in **Table 4**.

Tank Mix Partners

The following herbicides may be tank mixed with **Vantage** according to the instructions in the respective product labels.

- **Basagran® T/O**
- **Basagran® SG**

- Fortune®*
- Goal®
- Stinger®
- Surflan® AS

*For use only in AZ, NV, OR, WA.

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

VIII. GENERAL RESTRICTIONS AND LIMITATIONS - ALL CROPS

- **Maximum seasonal use rate:** See section IX. **Crop-Specific Information** for crop-specific maximum seasonal use rates.
- **Restricted Entry Interval (REI): 12 hours.**
- Avoid all direct or indirect contact with any desired grass crop unless otherwise recommended on the **Vantage® herbicide** label.
- Do not use treated vegetation as pasture, hay, feed, or forage.
- Do not apply **Vantage** with another pesticide whose label cautions against use with additives, surfactants, or oil adjuvants.
- Do not use **selective application equipment** such as recirculating sprayers, wiper applicators, or **shielded applicators**.
- **Stress:** Do not apply to grasses or crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control will probably 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:** **Vantage** is rainfast 1 hour after application.
- Do not apply through any type of **irrigation** equipment.

IX. CROP-SPECIFIC INFORMATION

Christmas Tree and Deciduous Tree Farms

Vantage® herbicide may be used to control annual and perennial grasses in Christmas and deciduous tree farms. If a Christmas tree or deciduous tree is not listed 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 4. Christmas Trees

Common Name	Scientific Name	Common Name	Scientific Name
Fir, Balsam	<i>Abies balsamea</i>	Spruce, Black Hills	<i>Picea glauca</i>
Douglas	<i>Pseudotsuga mensiesii</i>	Colorado Blue	<i>Picea pungens</i>
Frasier	<i>Abies fraseri</i>	Norway	<i>Picea abies</i>
Grand	<i>Abies grandis</i>	White	<i>Picea glauca</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 via</i>		
White	<i>Pinus strobus</i>		

TANK MIXES

Vantage + Goal[®] 1.6E herbicide

Vantage: up to 3.75 pints

Goal 1.6E: up to 2.5 pints

or

Vantage + Goal[®] T/O 2-XL herbicide

Vantage: up to 3.75 pints

Goal T/O 2-XL: 1.0-2.0 pints

(Not for use in California)

These tank mixes may be applied to control a broad spectrum of grass and broadleaf weeds in conifers and Christmas trees. Consult the **Goal 1.6E** and **Goal T/O 2-XL** labels for the list of grassy weeds and/or broadleaf weeds controlled. See previous pages for the minimum recommended rates of **Vantage** and see the **Goal 1.6E** and **Goal T/O 2-XL** label for minimum rates of **Goal 1.6E** and **Goal T/O 2-XL**. 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** and **Goal T/O 2-XL**.

Apply a spray volume of 20 gallons per acre at 40 psi 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** and **Goal T/O 2-XL** labels. Refer to **Goal** label for pre-emergence weed control application rates.

Specific Restrictions and Limitations

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.

Vantage + Stinger[®] herbicide

Vantage: 0.5-1.5 pints

Stinger: refer to manufacturer's label

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).

Specific Restrictions and Limitations

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.

Nonbearing Food Crops, Ornamental and Nursery Plantings, Rights of Way, Nonfood Crop Areas, Noncrop Areas, and Fallow Land

Apply **Vantage** 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-ways, fallow land, noncrop areas and nonfood crop areas such as airports, industrial sites, roadsides, storage yards, and other areas listed in section 1. **General Information**. Repeat application if new germination or regrowth occurs.

Ornamental Sites Tank Mixes

Vantage + Basagran® T/O herbicide

Vantage: up to 3.75 pints

Basagran T/O: up to 4 pints

or

Vantage + Basagran® SG herbicide

Vantage: up to 3.75 pints

Basagran SG: up to 18 ounces

These tank mixes may be applied as a directed spray to control yellow nutsedge, grass, and broadleaf weeds in nonbearing 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** and **Basagran SG** labels 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** and **Basagran SG** labels for this listing.

Vantage® herbicide + Surflan® AS herbicide

Vantage: up to 3.75 pints

Surflan AS: up to 4 pints

A tank mix of **Vantage + Surflan A.S.** may be applied to control weeds in ornamental sites including trees, shrubs and groundcovers.

Vantage + Fortune® herbicide

Vantage: up to 3.75 pints

Fortune: up to 4 pints

A tank mix of **Vantage + Fortune** may be applied to control weeds in these states: AZ, NV, OR, and WA).

Roadsides, Rights of Way, and Nonfood Crop Alleyways

(Not intended for domestic use, except by professional applicators)

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.

Timing: Apply **Vantage** to 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**.

Rate: Apply 1.5 pints per acre (0.6 ounces per 1,000 square feet) of **Vantage**.

Spray volume: Use 30-50 gallons per acre (5.5-9.0 pints per 1,000 square feet).

Restrictions and Limitations

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

Tree Farms

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 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**.

Rate: Apply 3-3.75 pints of **Vantage** per acre (0.6-0.7 ounces per 1,000 square feet). For greater fescue

suppression, up to 60 fluid ounces of **Vantage** can be used per acre (1.4 ounces per 1,000 square feet). Local environmental differences or growth differences at the time of application to tall fescue may cause results to be different from those 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.

Wildflowers

Vantage may be used to control grass in native wildflowers on roadsides and in 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 grass after wildflowers have emerged, but not during flowering. Apply **Vantage** 4-6 weeks after wildflowers have emerged, but always base the application timing on grass size. Make broadcast applications according to the **Annual Grass Control with Vantage** and **Perennial Grass Control with Vantage** tables. A second application may be necessary if a new flush of grass occurs later in the growing season.

Turf, Lawns, Rights of Way

FINE FESCUE GROWN FOR TURF SEED: (Not for use in California)

Vantage may be used to control annual and perennial grass weeds in fine fescue. On seedling centipedegrass, do not apply more than 1.5 pints per acre per application, or 3 pints per acre per season. On established centipedegrass, do not apply more than 2.25 pints per acre per application or 4.5 pints per acre per season. Applications should be made in the Pacific Northwest from November 1 to March 15 at the rates indicated in **Table 5**. Applying **Vantage** at other times of the year will generally result in reduced control of these problem grass weeds. **Vantage** does not control annual bluegrass or rattail fescue.

Restrictions and Limitations

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

Table 5. Application Rates for Pacific Northwest only

Grass Species	Weed Size	Rate per Acre*
Annual Grasses		
Annual Ryegrass	4-8"	2.25 pints
Downy Brome ¹	2-6"	3.75 pints
Perennial Grasses		
German Velvetgrass	2-4"	3-3.75 pints
Colonial and Highland Bentgrasses	2-4"	2.25-3.75 pints
¹ also called cheatgrass		
*If regrowth occurs or new plants emerge, make a second application at the same rate and weed size.		

Tank Mixes

Vantage + Basagran®-T/O herbicide

Vantage: 2.25 pints

Basagran T/O: 2-4 pints

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

Appendix

Tree Species Tolerant to Vantage® herbicide

Acacia, Knife Leaf	(<i>Acacia cultriformis</i>)
Arborvitae, Eastern	(var.- <i>Teenhny</i>) (<i>Thuja occidentalis</i>)
, Berkman's, Oriental	(<i>Thuja Orientalis</i>)
Ash, Green	(<i>Fraxinus pennsylvanicum</i>)
, Mountain	(<i>Sorbus aucuparia</i>)
, Mountain	(<i>Sorbus americans decora</i>)
, White	(<i>Fraxinus americans</i>)
Basswood, American	(<i>Tilia americans</i>)
Berkman's, Oriental	(<i>Thuja orientalis</i>)
Birch	(<i>Betula</i> sp)
, Asian White	(var. <i>Japonica</i>)(<i>Betula platyphylla</i>)
, European White	(<i>Betula pendula</i>)
, paper	(<i>Betula papyrifolia</i>)
, River, Black or Red	(<i>Betula nigra</i>)
Black Locust	(<i>Robinia pseudoacacia</i>)
Bottle-brush	(<i>Callistemon lanceolatus</i>)
Bottle Tree	(<i>Brachychiton populneus</i>)
Brisbane Box Tree	(<i>Tristania conferta</i>)
Cajeput Tree	(<i>Melaleuca quinquenervia</i>)
Carob Tree	(<i>Ceratonia siliqua</i>)
Carrot Wood	(<i>Cupaniopsis anacardioides</i>)
Catalpa, Southern	(<i>Catalpa bignonioides</i>)
Cherry Black	(<i>Prunus serotina</i>)
Cherry, Carolina	(<i>Prunus caroliniana "compacta"</i>)
Crabapple, Flowering	(<i>vardalgo</i> , <i>Radiant</i> , <i>Red Splendor</i> , <i>Royalty</i> , <i>Vanguard</i> , <i>Sylvestris</i> , <i>Domestic</i>) (<i>Malus</i> sp)
Cypress, False	(<i>Chamaecyparis pisifera</i>)
, Leyland	(<i>Cupressocyparis leylandii</i>)
, Italian	(<i>Cupressus sempeivirens</i>)
Dogwood, Flowering	(<i>Comus florida</i>)
, Silky	(<i>Comus amonum</i>)
, Pagoda	(<i>Comus alternifolia</i>)
Elm, Chinese Evergreen	(<i>Ulmus parvifolia</i>)
Eucalyptus	(<i>Eucalyptus robusta</i> , <i>lehmannii</i> , <i>nicholi granis</i>)
Fir	(<i>Abies</i> sp)
, Douglas	(<i>Pseudotsuga menziesii</i>)
, Frasier	(<i>Abies fraseri</i>)
, White	(<i>Abies concolor</i>)
Goldenrain Tree	(<i>Koelreuteria paniculata</i>)
Guava	(<i>Psidium fittorale</i>)
, Pineapple	(<i>Feijoa sellowiana</i>)
Gum, Blue	(<i>Eucalyptus globulus</i>)
, Lemon-scented	(<i>Eucalyptus citriodora</i>)
, Red Box	(<i>Eucalyptus polyanthemos</i>)
Hackberry, Common	(<i>Celtis occidentalis</i>)
Hemlock, Canadian	(<i>Tsuga canadensis</i>)
Holly, Chinese	(var. <i>Bufordii</i> , <i>Rotunda</i>)(<i>Ilex cornuta</i>)
, Hybrid	(var <i>Nellie Stevens</i>)(<i>Ilex spares</i>)
, Japanese	(var.- <i>Convexa</i> , <i>Compacta</i> , <i>Helleri</i> , <i>Hoogendorn</i>)(<i>Ilex crenata</i>)
, Yaupon	(<i>Ilex vomitoria</i>)
Ironbark, Red	(<i>Eucalyptus sideroxylon</i>)
Jacaranda	(<i>Jacaranda mimosifolia</i>)
Kentucky Coffee Tree	(<i>Gymnocladus dioicus</i>)
Larch, European	(<i>Larix europa</i>)
Laurel, Indian	(<i>Ficus microcarpa nitida</i>)

Linden	(<i>Tilia americans</i>)
, Liffleleaf	(<i>Tilia cordata</i>)
Locust, Honey	(<i>Gleditsia triacanthos inermis</i>)
Loquat	(<i>Eriobotrya japonica</i>)
Magnolia Southern	(<i>Magnolia grandiflora</i>)
Maple, Red	(<i>Acer rubrum</i>)
, Japanese	(<i>Acer palmatum</i>)
, Silver	(<i>Acer saccharinum</i>)
Mimosa Tree	(<i>silk tree</i>)(<i>Albizia julibrissin</i>)
Myoporum	(<i>Myoporum laetum</i>)
New Zealand Christmas Tree	(<i>Metrosideros excelsus</i>)
Oak	(<i>Quercus</i>)
, Water	(<i>Quercus nigra</i>)
, Willow	(<i>Quercus phellos</i>)
Olive Tree	(<i>Olea europaea</i>)
Olive, Russian	(<i>Elaeagnus angustifolia</i>)
Orchid Tree, Purple	(<i>Bauhinia variegata</i>)
Osage Orange	(<i>Maclura pomifera</i>)
Palm, Mediterranean fan	(<i>Chamaerops humilis</i>)
, Pygmy Date	(<i>Phoenix roebelenii</i>)
, Queen	(<i>Arecastrum romanzoffianum</i>)
, Sago	(<i>Cycas revoluta</i>)
, Windmill	(<i>Tracheocarpus fortunei</i>)
Palo Verde, Green	(<i>Parkinsonia aculeata</i>)
Paulownia Royal	(<i>Paulownia tomentosa</i>)
Pear, Common	(<i>Pyrus communis</i>)
, Evergreen	(<i>Pyrus kawakamii</i>)
, Ussurian	(<i>Pyrus ussuriensis</i>)
Pepper, Brazilian	(<i>Schinus terebinthifolius</i>)
Pine, Aleppo	(<i>Pinus halepensis</i>)
, Austrian	(<i>Pinus nigra</i>)
, Canary Island	(<i>Pinus canariensis</i>)
, Caribbean Slash	(<i>Pinus caribaea</i>)
, Italian Stone	(<i>Pinus pinea</i>)
, Jack	(<i>Pinus banksiana</i>)
, Japanese Black	(<i>Pinus thunbergii</i>)
, Loblolly	(<i>Pinus taeda</i>)
, Mugho	(<i>Pinus mugho</i>)
, Ponderosa, Western yellow	(<i>Pinus ponderosa</i>)
, Red	(<i>Pinus resinosa</i>)
, Scotch	(<i>Pinus sylvestris</i>)
, Shore	(<i>Pinus contra</i>)
, Slash	(<i>Pinus ellottii</i>)
, Southern	(<i>Pinus palustris</i>)
, Virginia	(<i>Pinus virginiana</i>)
, White	(<i>Pinus strobus</i>)
, White, Japanese	(<i>Pinus parviflora</i>)
, Yew	(<i>Podocarpus macrophyllus</i>)
Plum, Wild	(<i>Prunus americana</i>)
Poplar, Hybrid	(<i>Populus alba</i>)
Popular, Yellow, Tulip Tree	(<i>Liriodendron tulipifera</i>)
Purpleleaf, Bailey Acacia	(<i>Acacia baileyana</i>)
Redwood, Coast	(<i>Sequois sempervirens</i>)
Sandcherry, Western	(<i>Prunus besseyi</i>)
Sensitive Plant	(<i>Mimosa pudica</i>)
Silk Tree	(<i>Albizia julibrissin</i>)

Spruce, Black Hills
 ,Colorado Blue
 ,Norway
 ,White

Strawberry Tree
 Sumac, Standard, African
 Sweet Gum
 Sycamore
 Tea Tree, Australian
 Tipu Tree
 Walnut, Black
 Weeping Fig, Exotica
 Willow

 ,Australian
 ,Desert
 ,Peppermint

Yate, Bushy
 Yew, English

(var. *Densata*) (*Picea glauca*)
 (*Picea pungens*)
 (*Picea abies*)
 (*Picea glauca*)
 (*Arbutus unedo*)
 (*Rhus lancea*)
 (*Liquidambar styraciflus*)
 (*Platanus occidentalis*)
 (*Leptosperinum laevigatum*)
 (*Tipuana tipu*)
 (*Juglans nigra*)
 (*Ficus benjamina*)
 (*Salix matsudana tortuosa*)
 (*Cejera parviflora*)
 (*Pittosporum phillyraeoides*)
 (*Agonis flexuosa*)
 (*Eucalyptus lehmannii*)
 (*Taxus baccata*)

Shrub Species Tolerant to Vantage[®] herbicide

Abelia, Glossy
 Acacia, Bailey
 ,Knife Leaf
 ,Prostrate
 ,Sydney Golden Wattle

Andromeda
 Arborvitae, Oriental
 Arrowwood, Southern
 Azalea, Mollis hybrid
 ,Northern Lights Hybrid

Bamboo, Heavenly
 Barberry, Japanese
 ,Korean
 ,Redleaf

Bird of Paradise Bush
 Bluebeard
 Boxwood, Common

 ,African
 ,Japanese

Buckthorn, Glossy, Alder
 Camellia
 Cedar, Eastern Red

Cherry, Brush
 ,Manchu, Nanking

Chokecherry sp.
 Copper Plant, Caribbean
 Cotoneaster, Bearberry
 ,Cranberry
 ,'lowfast' Peking

Coyote Bush
 Cranberry Bush, American
 ,Golden

Crape Myrtle
 Currant, Alpine
 Dogwood, Red Osier
 Elaeagnus

(*Abelia grandiflora*)
 (*Acacia baileyana*)
 (*Acacia cultriformis*)
 (*Acacia redolens*)
 (*Acacia longifolia*)
 (*Pieris japonica*)
 (*Platycladus orientalis*)
 (*Viburnum dentatum*)
 (*R. x kosterianum*)
 (*R x kosterianum x R prinophyllum*)
 (*Nandina domestica*)
 (*Berberis thunbergii*)
 (*Berberis koreana*)
 (*Berberis Virginiana*)
 (*Caesalpinia gillesii*)
 (*Caryopteris clandonensis*)
 (*Buxus sempervirens*)
 (*Myrsine africana*)
 (var., *Japonica*)(*Buxus microphylla*)
 (*Rhamnus frangula*)
 (*Camellia japonica*)(*Camellia sasanqua*)
 (var.- *Pyramidiformis*, *canerit*)
 (*Juniperus virginiana*)
 (*Eugenia myrtifolia*)
 (*Prunus tomentosa*)
 (*Aronia meloelata*)
 (*Euphoria cotinifolia*)
 (*Cotoneaster dammerii*)
 (*Cotoneaster apiculata*)
 (*Cotoneaster acutifolia*)
 (*Baccharis pilularis*)
 (*Viburnum trilobum*)
 (*Viburnum opulus aureum*)
 (*Lagestromia indica*)
 (*Ribes alpinum*)
 (*Cornus stolonifera*)
 (*Elaeagnus umbellata*)

Escallonia	(<i>Escallonia fradesii</i>)(<i>Escallonia rubia</i>)
Euonymus, Evergreen	(var. <i>Golden, Silver King</i>)
	(<i>Euonymus japonica</i>)
,Winged	(<i>Euonymus alata</i>)
Fig, Creeping	(<i>Ficus repens</i>)
Firethorn	(<i>Pyracantha graberi</i>)
Forsythia, Greenstem	(<i>Forsythia viridissima bronxeniss</i>)
Flax, New Zealand	(<i>Phormium tenax</i>)
Fuchsia, Australian	(<i>Correa pulchella</i>)
Gardenia	(var. <i>Mystery, Padicans</i>)..(<i>Gardenia augusta</i>)
	(<i>Gardenia jasminoides</i>)
,Dwarf	(var. <i>Veitchii</i>)(<i>Gardenia jasminoides</i>)
Gold Vine, Guinea	(<i>Hibbertia scandens</i>)
Hakea	(<i>Hakea proteacea</i>)
Hawthorn, Indian	(<i>Phaphiolepis indica</i>)
Hibiscus, Blue	(<i>Alyogyne huegelli</i>)
, Chinese	(<i>Hibiscus rosa-sinensis</i>)
Holly, Dwarf Burford	(var. <i>Burfordii Nana</i>)(<i>Ilex comuta</i>)
Honeysuckle, Bush	(<i>Diervilla lonicera</i>)
‘ Cape	(<i>Tecomaria capensis</i>)
Hydrangea	(<i>Hydrangea macrophylla</i>)
Jasmine, Asiatic	(<i>Trachelospermum asiaticum</i>)
,Orange	(<i>Murraya paniculata</i>)
,Star	(<i>Trachelospermum jasminoides</i>)
,Winter	(<i>Jasmine nudiflorum</i>)
Jessamine, Carolina	(<i>Gelsemium sempervirens</i>)
Jojoba	(<i>Simmondsia chinensis</i>)
Juniper, Chinese	(var. <i>Maneyi, Old Gold, Phtzerana,</i>
	<i>Sea Green, Hekii, Nana, Torulosa, Phtzerana</i>
	(<i>Aurea, PfiL-er, Golden PfiLer</i>)
	(<i>Juniperus chinensis</i>)
,Creeping	(var- <i>Bluechip, Hughes, Plumosa,</i>
	<i>PrInce of Wales, Webbeti, Wiltonii, Bar Harbor,</i>
	<i>Andorra, Variegata, Youngstown Blue Rug</i>).
	(<i>Juniperus horizontalis</i>)
,Ozark	(<i>Juniperus sp</i>)
,Rocky Mountain	(var. <i>Blue Heaven, Welchii, Wichita Blue, Medova, Moffet,</i>
	<i>Pyramidal Green, Springtime, Admiral</i>)
	(<i>Juniperus scopulorum</i>)
Juniper, Savin	(var.- <i>Skandia, Arcadia, Broadmoor, Buffalo, Pepin</i>)
	(<i>Juniperus sabina</i>)
,Shore	(var. <i>Compacta</i>)(<i>Juniperus conferta</i>)
,Tam	(var. <i>Tamariscifolia</i>)(<i>Junlperus sabina</i>)
Lantana, Purple Trailing	(<i>Lantana montevidensis</i>)
Laurustinus	(<i>Viburnum tinus</i>)
Lemonade Berry	(<i>Rhus integrifolia</i>)
Lilac, Common Purple	(<i>Syringa vulgaris purpura</i>)
Liriope, Green	(<i>Liriope muscari</i>)
, Variegated	(<i>Liriope muscari</i>)
Mickey Mouse Bush	(<i>Ochna serrulata</i>)
Mirror Plant	(<i>Coprosma repens</i>)
Mock Orange	(<i>Pittosporum tobira</i>)
Mountain Lilac, Carmel Creeper	(<i>Ceanothus griseus</i>)
Myrtle, Dwarf	(<i>Myrtus communis compacta</i>)
Nandina, Heavenly Bamboo	(<i>Nandina domestica</i>)
Nannyberry	(<i>Viburnum lantago</i>)

Ninebark	(<i>Physocarpus opulifolius</i>)(var <i>Aureus</i>)
	(<i>Physocarpus opulifolius nanus</i>)
Oleander	(<i>Nerium oleander</i>)
Orchid, rockrose	(<i>Cistus purpureus</i>)
Oregon Grape	(<i>Mahonia aquifolium</i>)
Osmanthus, Holly-leaf	(<i>Osmanthus heterophyllum</i>)
, Sweet Olive	(<i>Osmanthus fragrans</i>)
Palm, Natal	(var. <i>Green Carpet Tuttle</i>)
	(<i>Carissa grandiflora</i>)
Pampas Grass	(<i>Cortaderia selloana</i>)
Photinia	(<i>Photinia</i> sp)
, Fraser	(<i>Photinia fraser</i>)
Pink Lady	(<i>Pahioleis indica</i>)
Pink Powder Puff	(<i>Calliandra haematocephala</i>)
Pittosporum, Variegated Japanese	(<i>Pittosporum tobira variegata</i>)
Plumbago, Cape	(<i>Plumbago capensis</i>)
Podocarpus, Yew	(<i>Podocarpus macrophyllum</i>)
Princess Flower	(<i>Tibouchina urvilleana</i>)
Privet	(<i>Ligustrum indica</i>)
, Glossy	(var.- <i>Lake Tresca</i>)(<i>Ligustrum lucidum</i>)
, Japanese, Waxleaf	(<i>Ligustrum japonicum</i>)
, Texas	(<i>Ligustrum texanum</i>)
Purple Hop Bush	(<i>Dodonaea viscosa</i>)
Pyracantha	(<i>Pyracantha graberi</i>)
Rhododendron - Azalea	(var. <i>Hinocrimson</i> , <i>Hershey Red</i> , <i>Coral Blue</i> , <i>Hinodigiri</i> , <i>Christmas Cheer</i> , <i>Pink Ruffle</i> , <i>Formosa Flame</i> , <i>Delaware</i> <i>Valley White</i> , <i>New White</i>) (<i>Rhododendron</i> sp)
	(<i>Prunus cistena</i>)
Sandcherry, Purpleleaf	(<i>Amelanchier laevis</i>)
Serviceberry, Allegheny	(var. <i>Regent</i>)(<i>Amelanchier alnifolia</i>)
, Saskatoon	(<i>Euonymus japonica</i>)
Silver King	(<i>Duranta stenostachya</i>)
Sky Flower, Brazilian	(<i>Viburnum opulus sterilis</i>)
Snowball Bush	(<i>Euonymus kiautschovica</i>)
Spindle Tree	(<i>Spiraea vanhouttei</i>)
Spiraea	(var: <i>Anthony Waterer</i> , <i>Froebellii</i> , <i>Goldflame</i>)
	(<i>Spiraea bumalda</i>)
	(<i>Spiraea trilobata</i> ioica)
	(var <i>Snowbound</i>) (<i>Spiraea nipponica</i> ioica)
Star Plant, Lavender	(<i>Grewia occidentalis</i>)
Tea Tree, Australian	(<i>Leptospermum laevigatum</i>)
, New Zealand	(var. <i>PL-dGlow</i>)
	(<i>Leptospermum scoparium</i>)
Texas Ranger	(<i>Leucophyllum frutescens</i>)
Toyon, California Holly	(<i>Heteromeles arbutifolia</i>)
Trumpet Vine, Pink	(<i>Pandorea rosea</i>)
Veronica	(<i>Hebe</i> 'Coed)
Viburnum, Japanese	(<i>Viburnum japonicum</i>)
, Sandankwa	(<i>Viburnum suspensum</i>)
Wayfaring Tree	(<i>Viburnum lantanoides</i>)
Weeping Fig, Exotica	(<i>Ficus benamina</i>)
Wheeler's Dwarf, Variegated	(var.- <i>Wheller</i>)
	(<i>Pittosporum tobira</i>)
Yellow Bells	(<i>Tecoma stans</i>)
Yesterday-Today-and-Tomorrow..	(<i>Brunfelsia calycina</i>)
Yew	(<i>Taxus cuspidata vigatum</i>)

Ornamentals and Bedding plants tolerant to Vantage herbicide

Allysum	(<i>Alyssum</i> sp.)
Asparagus, Myers	(var. <i>Meyeri</i>)(<i>Asparagus densiflorus</i>)
,Spenger	(var <i>Sprengeri</i>)
	(<i>Asparagus densiflorus</i>)
Aster, New York	(<i>Aster novi-belgii</i>)
, Stokes	(var: <i>Blue, White</i>)(<i>Stokesia cyanaea</i>)
Baby's Breath	(var: <i>Bristo Fairy</i>)
	(<i>Gypsophila paniculata</i>)
Begonia	(<i>Begonia semperflorens</i>)
Bellflower, Tussock	(var: <i>Canterbury Bells</i>)
	(<i>Campanula carpatica</i>)
Bittersweet, American	(<i>Calastrus scandens</i>)
Black-eyed Susan	(var: <i>Goldilocks</i>)(<i>Pudbeckia hirta</i>)
Bleeding Heart	(<i>Dicentra spectabilis</i>)
Butterfly Weed	(<i>Asclepias tuberosa</i>)
Bower Vine	(<i>Pandorea jasminoides</i>)
Cactus, Barrel	(<i>Echinocactus</i> sp.)
Candytuft	(<i>beris sempervirens</i>)(<i>Iberis amara</i>)
Canna	(<i>Canna</i> sp)
Cassia, Feathery	(<i>Cassia artemisioides</i>)
Chrysanthemum, Marguarite	(<i>Chrysanthemum frutescens</i>)
	(<i>Chrysanthemum indicum</i>)
Cockscomb	(<i>Celosia argentea</i>)(<i>Canna</i>)
Coleus	(<i>Coleus blumei</i>)
Coneflower, Purple	(var: <i>Gloriosa Dairy</i>)
	(<i>Echinacea purpurea</i>)
<i>Coralbells</i>	(<i>Heuchera sanguinea</i>)
Coreopsis	(var: <i>Sunray</i>)(<i>Coreopsis lanceolata</i>)
Cup of Gold Vine	(<i>Solandra maxima</i>)
Daffodil	(<i>Narcissus</i> spp.)
Dahlia	(<i>Dahlia pinnata</i>)
Daisy Bush	(<i>Euryops pectinatus</i>)
, Blue	(<i>Felicia amellioides</i>)
Daisy, Shasta	(var: <i>Alaska</i>)(<i>Chrysanthemum maximum</i>)
Daylily	(<i>Hemerocallis hybrids</i>)
Dianthus	(<i>Dianthus deltoides</i>)
Dragonhead, False	(<i>Physostegia virginiana</i>)
Dusty Miller	(<i>Centaurea cineraria</i>)
Fern, Sprenger Asparagus	(<i>Asparagus densiflorus Sprengeril</i>)
Fescue, Blue	(<i>Festuca ovina</i>)
Flowering tobacco	(<i>Nicotiana</i> sp.)
Fountain Grass, Red	(<i>Pennisetum setaceum</i>)
Gazania	(<i>Gazania ringens leucolaena</i>)(<i>Gazania</i> sp.)
Geranium	(<i>Geranium</i> sp.)
,Martha Washington	(<i>Pelargonium domesticum</i>)
Gerbera Daisy	(<i>Gerbera jamesonii</i>)
Geum	(var: <i>Lady Strathedon, Mrs. Bradshaw,</i>
	<i>Mrs. Bradshaw Improved</i>)
	(<i>Geum quellyon</i>)
Gladiolus	(<i>Gladiolus</i> sp.)
Heather, False	(<i>Cuphea hyssopifolia</i>)

Honeysuckle, Amar	(<i>Lonicera maachii</i>)
,Fly	(var: Emerald Mound, Clavey's Dwarf)
	(<i>Lonicera xylosteum</i>)
,Japanese	(<i>Lonicera japonica</i>)
,Morrow	(<i>Lonicera morrowii</i>)
,Tatarian	(var.- Zabeli)(<i>Lonicera tatarica</i>)
Hopseed Bush, Purple	(var <i>Purpurea</i>)(<i>Dodonaea viscosa</i>)
Impatiens	(<i>Impatiens</i> sp.)
Iris	(<i>Iris</i> sp.)
, African	(<i>Iris bicolor</i>)
Ivy, Grape	(var.- Ellen Danica)(<i>Cissus rhombifolia</i>)
Jack-in-the-Pulpit	(<i>Arisaema pusillum</i>) Mrs. Bradshaw Improved)
Jade Plant	(<i>Crassula argentea</i>)
Jasmine, Madagascar	(<i>Stephanotis floribunda</i>)
Lamb's Ear	(<i>Stachys lanata</i>)
Lavender, English	(<i>Lavandula vera</i>)
,French	(<i>Lavandula dentata</i>)
,Cotton	(<i>Santolina chamaecyparissus</i>)
Lilac, Chinese	(<i>Syringa chinensis</i>)
, Common Purple.	(var.- Charles Joly, Ludwig Spaeth, Jay Tree)
	(<i>Syringa vulgaris purpurpa</i>)
,Meyer	(var.- Palibin)(<i>Syringa</i> sp.)
,Korean	(var., Miss Kim)(<i>Syringa patula</i>)
Lilac, Mountain	(<i>Ceanothus griseus</i>)
Lily-of-the-Nile, Peter Pan	(<i>Agapanthus africanus</i>)
Lily-of-the-Valley	(<i>Convallaria majalis</i>)
Lobelia	(<i>Lobelia erinus</i>)
Marigold	(<i>Tagetes</i> sp.)
Mirror Plant	(<i>Coprosma baueri</i>)
, Vahegated	(<i>Coprosma repens</i>)
Moneywort, Creeping Jenny	(<i>Lysimachia nummularia</i>)
Moss, Rose	(<i>Portulaca grandiflora</i>)
, Sandwort	(<i>Arenaria Verna</i>)
Pansy, Johnny-Jump-Up	(<i>Viola tricolor</i>)
Pepper, Ornamental	(<i>Capsicum</i> sp.)
Periwinkle, Madagascar	(<i>Catharanthus roseus</i>)
	(<i>Vinca minor</i>)
Petunia	(<i>Petunia</i> sp.)
Phlox, Perennial	(<i>Phlox paniculata</i>)
Plantain Lily	(<i>Hosta</i> sp)
Purple Loosestrife	(var.- Morden's Glpam)
	(<i>Lythrumvirgatum</i>)
Raspberry Ice	(<i>Bougainvillea</i> sp.)
Sage	(<i>Salvia griegii</i>)
Sea Pinks, Thrift	(<i>Armeria maritima</i>)
Sedum, Stonecrop	(<i>Sedum x rubrotinctum</i>)
	(Lavender cofton)
Shrimp Plant	(<i>Justicia brandegeana</i>)
Sky Flower, Brazilian	(<i>Duranta stenostachya</i>)
Snail Vine	(<i>Vigna cararcalla</i>)
Snapdragon	(<i>Antirrhinum majus</i>)
Speedwell, Spike	(<i>Veronica spicata</i>)
Statice, Perennial	(<i>Limonium perazil</i>)
Stock	(<i>Mattiola incana</i>)
Sweet Grass	(<i>Acorus gramineus</i>)
Sweet William	(<i>Dianthus barbatus</i>)
Transvaal Daisy	(<i>Gerbera jamesonii</i>)

Trumpet Vine, Blood red
 ,Lavender
 , Pink
 Tulip
 Verbena
 Wandering Jew
 Wisteria
 Yarrow (var: Cerise Queen)
 , Debutante
 Yellow Trumpet
 Zinnia

(*Distictis buccinatoria*)
 (*Clytostoma callistegioides*)
 (*Pandorea rosea*)
 (*Tulipa* spp)
 (*Verbena* sp)
 (*Tradescantia* sp.)
 (*Wisteria sinensis*)
 (*Achillea Millefolium*)
 (*Achillea taygetea* v.)
 (*Macfadyena unguis-cati*)
 (*Zinnia elegans*)

Ground covers tolerant to Vantage herbicide

Aaron's Beard
 Aptenia (var: Red Apple)
 Bergenia, Winter-blooming
 Bugleweed
 Capeweed
 Carpathian, Harebell
 Cinquefoil, Spring
 Coyote brush
 Crownvetch
 Cushion Bush
 Daisy, Trailing African, Freeway
 Daisy, White African
 Gazania, Trailing
 Green Carpet
 Ivy, Algerian
 Ivy, Boston
 Ivy, English
 Ivy, Grape
 Ivy, Hahn's
 Lantana, Lavender
 Lily-turf, Big Blue
 Lippia
 Mondo Grass
 Myoporum
 Pachysandra
 Periwinkle
 Plumbago, Dwarf
 Pork and Beans
 Rosea Ice Plant
 Rosemary, Dwarf
 Rupture Wort
 St. Johnswort, Creeping
 Stonecrop, Sedum
 Verbena
 Verbena, Blue

(*Hypericum calycinum*)
 (*Aptenia cordifolia*)
 (*Bergenia crassifolia*)
 (*Ajuga reptans*)
 (*Arctotheca calendula*)
 (*Campanula carpatia*)
 (*Potentilla tabernaemontani*)
 (var. Twin Peaks) (*Baccharis pilularis*)
 (*Coronilla varia*)
 (*Calocephalus brownii*)
 (*Osteospermum*)
 (*Osteospermum fruticosum alba*)
 (*Gazania regens leucolaena*)
 (*Herniaria glabra*)
 (*Hedera canaiensis*)
 (*Parthenocissus tricuspidata*)
 (*Hedera helix*) (var. California)
 (var Ellen Danica) (*Cissus rhombifolia*)
 (var.- Hahnii) (*Hedera helix*)
 (*Lantana montevidensis*)
 (*Liriope muscari*)
 (*Phyla nodiflora*)
 (*Ophiopogon japonicus*)
 (var. Prostratum) (*Myoporum parvifolium*)
 (*Pachysandra terminalis*)
 (*Vinca major*)
 (*Ceratostigma plumbaginoides*)
 (*Sedum rubrotinctum*)
 (*Drosanthemum floribundum*)
 (var. Prostratum)(*Rosmarinus officinalis*)
 (*Herniaria glabra*)
 (*Hypericum calycinum*)
 (*Sedum rubrotinctum*)
 (*Verbena officinalis*)
 (*Verbena peruviana*)

Wildflowers tolerant to Vantage

African daisy
 Baby blue eyes
 Baby snapdragon
 Baby's breath
 Bachelor button
 Bird's eyes
 Black eyed Susan

Dimorphotheca aurantiaca
Nemophila insignis
Linaria macrocarpa
Gypsophila muralis
Centaurea cyanus
Gilia tricolor
Rudbeckia hirta

Blanketflower
 Blue Fescue
 Blue flax
 Butterflyweed
 Calendula
 California poppy
 Calliopsis
 Candytuft
 Carnation
 Catchfly
 Chicory
 Chinese houses
 Columbine
 Corn poppy
 Cornflower
 Cosmos
 Creeping daisy
 Dames rocket
 Drummond phlox
 Dwarf primrose
 Firewheel
 Five spot cornflower
 Foxglove
 Godetia
 Grayhead coneflower
 Hard fescue
 Indian blanket
 Indian paintbrush
 Jewels of Opar
 Johnny-jump-up
 Lance-leaved coreopsis
 Lemon mint
 Liatris
 Lupine
 Moss verben
 New England aster
 Nodding catchfly pink
 Oxeye daisy
 Painted daisy
 Perennial lupine
 Plains coreopsis
 Poor man's weather glass
 Prairie aster
 Purple coneflower
 Purpleknot toadflax
 Queen Anne's lace
 Red ribbons
 Rocket larkspur
 Sainfoin
 Sand bluebonnet
 Scarlet flax
 Showy primrose
 Siberian wallflower
 Spurred snapdragon
 Stock
 Sulfur cosmos
 Sweet alyssum

Gaillardia aristata
Festuca ovina glauca
Linum lewisii
Asclepias tuberosa
Calendula officinalis
Eschscholzia californica
Coreopsis tinctoria
Iberis sempervirens
Dianthus
Silene armeria
Chicory intybus
Collinsia heterophylla
Aquilegia spp.
Papaver rhoeas
Centaurea cyanus
Cosmos bipinnatus

Hesperis matronalis
Phlox drummondii
Oenothera sp.
Gaillardia pulchella
Centaurea sp.
Digitalis purpurea
Clarkia amoena
Echinacea pallida
Festuca longifolium
Gaillardia pulchella
Castilleja coccinea
Talinum paniculatum
Viola pedata
Coreopsis lanceolata
Monarda citriodora
Liatris spicata
Lupinus spp.
Verbena tenuisecta
Aster novi-anglae
Silene sp.
Chrysanthemum leucanthemum
Chrysanthemum carinatum
Lupinus perennis
Coreopsis tinctoria

Machaeranthera tanacetifolia
Echinacea purpurea
Linaria sp.
Daucus carota
Clarkia concinna
Delphinium ajacis
Conobrychis vicifolia
Lupinus subcamosus
Linum rubrum
Oenothera speciosa
Cheiranthus spp.
Linaria macrocanna
Matthiola maritima
Cosmos sulfurous
Lobularia maritima

Sweet William
Texas bluebonnet
Tickseed
Tidy tips
Virginian stock
Wallflower
White yarrow

Dianthus barbatus
Lupinus texensis
Coreopsis lanceolate
Layia platyglossa
Malcolmia maritima
Cheiranthus allionii
Achillea millefolium

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.

Trees

Red Oak
White Oak

Quercus rubra
Quercus alba

Shrubs

Azalea (var Snow)
Potentilla
(var Jackmanni, K. VanDyke)
Privet, Japanese

Rhododendron sp
Potentilla fruticosa
Potentilla Verna
Ligustrum japonica

Ornamental

Snow-in-summer

Cerastium tomentosum

Nonbearing Food Crops and Nursery Liners Tolerant to Vantage herbicide

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

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

Weeds listed in this label

Common Name	Scientific Name
Bahiagrass	<i>Paspalum notatum</i>
Barnyardgrass	<i>Echinochloa crus-gaffi</i>
(Watergrass)	
Bentgrass,	<i>Agrostis tenuis</i>
(Highland/Colonial)	
Bermudagrass	<i>Cynodon dactylon</i>
(Wiregrass)	
Bluegrass, Annual	<i>Poa annua</i>
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>
Brome, Downy	<i>Bormus tectorum</i>
Centipede Grass	<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>
Foxtail, Giant	<i>Setaria faberi</i>
(Pigeongrass)	
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 cilianensis</i>
Orchardgrass	<i>Dactylis glomerata</i>
Panicum, Browntop	<i>Panicum fasciculatu</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 saliva</i>
Rye	<i>Secale Cerea/e</i>
Wheat	<i>Triticum aestivum</i>
Wild Oats	<i>Avena fatua</i>
Wild Proso Millet	<i>Panicum miliaceum</i>
Wirestern Muhly	<i>Muhlenbergia frondosa</i>
Witchgrass	<i>Panicum caviare</i>

Sites:**This product can be used on the following sites:**

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

Look inside for complete **Restrictions and Limitations** and **Application Instructions**.

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 Micro Flo Company ("MICRO FLO") or the Seller. All such risks shall be assumed by the Buyer.

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