

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

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	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
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		
Shattercane/Wildcane		
Sprangletop, Red ⁴		
Tall Fescue, Seedling		
Volunteer, Barley		
, Oats		
, Rye		
, Wheat		
Wild Oats		
Wild Proso Millet		
Wirestem Muhly		
Witchgrass		
Woolly Cupgrass		
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

¹Use 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.

¹Use 1.5% for wirestem muhly.

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

**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.

Appendix

Tree Species Tolerant to Vantage® herbicide

Acacia, Knife Leaf	(<i>Acacia cultriformis</i>)
Arborvitae, Eastern	(var. - <i>Teahny</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 sp</i>)
, 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>)
Cajepul Tree	(<i>Melaleuca quinquenervia</i>)
Carob Tree	(<i>Ceratonia siliqua</i>)
Carrot Wood	(<i>Cupaniopsis anacardioides</i>)
Catalpa, Southem	(<i>Catalpa bignonioides</i>)
Cherry Black	(<i>Prunus serotina</i>)
Cherry, Carolina	(<i>Prunus caroliniana "compacta"</i>)

Crabapple, Flowering	(vandalgo, Radiant, Red Splendor, Royalty, Vanguard, Sylvestris, Domestic)
Cypress, False	(Malus sp)
, Leyland	(Chamaecyparis pisifera)
, Italian	(Cupressocyparis leylandii)
Dogwood, Flowering	(Cupressus sempervirens)
, Silky	(Cornus florida)
, Pagoda	(Cornus amomum)
Elm, Chinese Evergreen	(Cornus alternifolia)
Eucalyptus	(Ulmus parvifolia)
Fir	(Eucalyptus robusta, lehmannii, nicholi granis)
, Douglas	(Abies sp)
, Frasier	(Pseudotsuga menziesii)
, White	(Abies fraseri)
Goldenrain Tree	(Abies concolor)
Guava	(Koeleria paniculata)
, Pineapple	(Psidium littorale)
Gum, Blue	(Folija sellowiana)
, Lemon-scented	(Eucalyptus globulus)
, Red Box	(Eucalyptus citriodora)
Hackberry, Common	(Eucalyptus polyanthemos)
Hemlock, Canadian	(Celtis occidentalis)
Holly, Chinese	(Taxus canadensis)
, Hybrid	(var. Bufordii, Rotunda)(Ilex cornuta)
, Japanese	(var. Nello Stevens)(Ilex spares)
, Yaupon	(var. - Convexa, Compacta, Helleri, Hoogendorn)(Ilex crenata)
Ironbark, Red	(Ilex vomitoria)
Jacaranda	(Eucalyptus sideroxylon)
Kentucky Coffee Tree	(Jacaranda mimosifolia)
Larch, European	(Gymnocladus dioica)
Laurel, Indian	(Larix europae)
Linden	(Ficus microcarpa nitida)
, Littleleaf	(Tilia americana)
Locust, Honey	(Tilia cordata)
Loquat	(Gleditsia triacanthos inermis)
Magnolia Southern	(Eriobotrya japonica)
Maple, Red	(Magnolia grandiflora)
, Japanese	(Acer rubrum)
, Silver	(Acer palmatum)
Mimosa Tree	(Acer saccharinum)
Myoporum	(silk tree)(Albizia julibrissin)
New Zealand Christmas Tree	(Myoporum laetum)
Oak	(Metrosideros excelsus)
, Water	(Quercus)
, Willow	(Quercus nigra)
Olive Tree	(Quercus phellos)
Olive, Russian	(Olea europaea)
Orchid Tree, Purple	(Elaeagnus angustifolia)
Osage Orange	(Bauhinia variegata)
Palm, Mediterranean fan	(Macclura pomifera)
, Pygmy Date	(Chamaerops humilis)
, Queen	(Phoenix roebelenii)
, Sago	(Arecastrum romanoffianum)
, Windmill	(Cycas revoluta)
Palo Verde, Green	(Trachocarpus fortunei)
Paulownia Royal	(Parkinsonia aculeata)
Pear, Common	(Paulownia tomentosa)
, Evergreen	(Pyrus communis)
, Ussurian	(Pyrus kawakamii)
Pepper, Brazilian	(Pyrus ussuriensis)
Pine, Aleppo	(Schinus terebinthifolius)
, Austrian	(Pinus halepensis)
, Canary Island	(Pinus nigra)
, Caribbean Slash	(Pinus canariensis)
, Italian Stone	(Pinus caribaea)
, Jack	(Pinus pinea)
, Japanese Black	(Pinus banksiana)
, Loblolly	(Pinus thunbergii)
, Mugho	(Pinus taeda)
, Ponderosa, Western yellow	(Pinus mugho)
, Red	(Pinus ponderosa)
, Scotch	(Pinus resinosa)
, Shore	(Pinus sylvestris)
, Slash	(Pinus strobus)
, Southern	(Pinus elliotii)
	(Pinus palustris)

	, 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>Sequoia sempervirens</i>)
Sandcherry, Western		(<i>Prunus besseyi</i>)
Sensitive Plant		(<i>Mimosa pudica</i>)
Silk Tree		(<i>Albizia julibrissin</i>)
Spruce, Black Hills		(var. <i>Densata</i>) (<i>Picea glauca</i>)
	, Colorado Blue	(<i>Picea pungens</i>)
	, Norway	(<i>Picea abies</i>)
	, White	(<i>Picea glauca</i>)
Strawberry Tree		(<i>Arbutus unedo</i>)
Sumac, Standard, African		(<i>Rhus lancea</i>)
Sweet Gum		(<i>Liquidambar styraciflua</i>)
Sycamore		(<i>Platanus occidentalis</i>)
Tea Tree, Australian		(<i>Lepidospermum laevigatum</i>)
Tipu Tree		(<i>Tipuana tipu</i>)
Walnut, Black		(<i>Juglans nigra</i>)
Weeping Fig, Exotica		(<i>Ficus benjamina</i>)
Willow		(<i>Salix matsudana tortuosa</i>)
	, Australian	(<i>Cejera parviflora</i>)
	, Desert	(<i>Pittosporum phyllaeroides</i>)
	, Peppermint	(<i>Agonis flexuosa</i>)
Yate, Bushy		(<i>Eucalyptus lehmannii</i>)
Yew, English		(<i>Taxus baccata</i>)
Shrub Species Tolerant to Vantage® herbicide		
Abelia, Glossy		(<i>Abelia grandiflora</i>)
Acacia, Bailey		(<i>Acacia baileyana</i>)
	, Knife Leaf	(<i>Acacia cultriformis</i>)
	, Prostrate	(<i>Acacia redolens</i>)
	, Sydney Golden Wattle	(<i>Acacia longifolia</i>)
Andromeda		(<i>Pieris japonica</i>)
Arbovitae, Oriental		(<i>Platycladus orientalis</i>)
Arrowwood, Southern		(<i>Viburnum dentatum</i>)
Azalea, Mollis hybrid		(<i>R. x kosterianum</i>)
	, Northern Lights Hybrid	(<i>R x kosterianum x R prinophyllum</i>)
Bamboo, Heavenly		(<i>Nandina domestica</i>)
Barberry, Japanese		(<i>Berberis thunbergii</i>)
	, Korean	(<i>Berberis koreana</i>)
	, Redleaf	(<i>Berberis Virginian</i>)
Bird of Paradise Bush		(<i>Caesalpinia gilesii</i>)
Bluebeard		(<i>Caryopteris clandonensis</i>)
Boxwood, Common		(<i>Buxus sempervirens</i>)
	, African	(<i>Myrsine africana</i>)
	, Japanese	(var., <i>Japonica</i>) (<i>Buxus microphylla</i>)
Buckthorn, Glossy, Alder		(<i>Rhamnus frangula</i>)
Camellia		(<i>Camellia japonica</i>) (<i>Camellia sasanqua</i>)
Cedar, Eastern Red		(var. - <i>Pyramidiformis, canerati</i>)
Cherry, Brush		(<i>Juniperus virginiana</i>)
	, Manchu, Nanking	(<i>Eugenia myrtifolia</i>)
Chokecherry sp.		(<i>Prunus tomentosa</i>)
Copper Plant, Caribbean		(<i>Aronia melanocarpa</i>)
Cotoneaster, Bearberry		(<i>Euphoria cotinifolia</i>)
	, Cranberry	(<i>Cotoneaster dammeri</i>)
	, Lowfast Peking	(<i>Cotoneaster apiculata</i>)
Coyote Bush		(<i>Cotoneaster acutifolia</i>)
Cranberry Bush, American		(<i>Baccharis pilularis</i>)
	, Golden	(<i>Viburnum trilobum</i>)
Crape Myrtle		(<i>Viburnum opulus aureum</i>)
Current, Alpine		(<i>Lagostromia indica</i>)
Dogwood, Red Osier		(<i>Ribes alpinum</i>)
Elaeagnus		(<i>Cornus stolonifera</i>)
Escallonia		(<i>Elaeagnus umbellata</i>)
Euonymus, Evergreen		(<i>Escallonia fradesii</i>) (<i>Escallonia rubra</i>)
	, Winged	(var. <i>Golden, Silver King</i>)
Fig, Creeping		(<i>Euonymus japonica</i>)
Firethorn		(<i>Euonymus alata</i>)
		(<i>Ficus repens</i>)
		(<i>Pyracantha graberi</i>)

Forsythia, Greenstem	(<i>Forsythia viridissima bronzenis</i>)
Flax, New Zealand	(<i>Phormium tenax</i>)
Fuchsia, Australian	(<i>Correa pulchella</i>)
Gardenia	(var. <i>Mystery</i> , <i>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 huegelii</i>)
, Chinese	(<i>Hibiscus rosa-sinensis</i>)
Holly, Dwarf Burford	(var. <i>Burfordii Nana</i>)(<i>Ilex cornuta</i>)
Honeysuckle, Bush	(<i>Diervilla lonicera</i>)
, Cape	(<i>Tecomaria capensis</i>)
Hydrangeas	(<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</i> , <i>Old Gold</i> , <i>Phizerana</i> , <i>Sea Green</i> , <i>Hekii</i> , <i>Nana</i> , <i>Tonulosa</i> , <i>Phizerana</i> (<i>Aurea</i> , <i>PfL-er</i> , <i>Golden PfL-er</i>) (<i>Juniperus chinensis</i>)
	(var. <i>Bluechip</i> , <i>Hughes</i> , <i>Plumosa</i> , <i>Prince of Wales</i> , <i>Webbii</i> , <i>Wiltonii</i> , <i>Bar Harbor</i> , <i>Andorra</i> , <i>Variegata</i> , <i>Youngstown Blue Rug</i>). (<i>Juniperus horizontalis</i>)
, Creeping	(<i>Juniperus sp</i>)
, Ozark	(var. <i>Blue Heaven</i> , <i>Welchii</i> , <i>Wichita Blue</i> , <i>Medova</i> , <i>Moffet</i> , <i>Pyramidal</i>)
, Rocky Mountain	(<i>Green</i> , <i>Springtime</i> , <i>Admiral</i>) ... (<i>Juniperus scopulorum</i>)
Juniper, Savin	(var. - <i>Skandia</i> , <i>Arcadia</i> , <i>Broadmoor</i> , <i>Buffalo</i> , <i>Pepin</i>)(<i>Juniperus sabina</i>)
, Shore	(var. <i>Compacta</i>)(<i>Juniperus conferta</i>)
, Tam	(var. <i>Tamariscifolia</i>)(<i>Juniperus 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 purpurea</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 lentago</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 heterophyllus</i>)
, Sweet Olive	(<i>Osmanthus fragrans</i>)
Palm, Natal	(var. <i>Green Carpet</i> , <i>Turtle</i>) (<i>Carissa grandiflora</i>)
Pampas Grass	(<i>Cortaderia selloana</i>)
Photinia	(<i>Photinia sp</i>)
, Fraser	(<i>Photinia fraser</i>)
Pink Lady	(<i>Pachistima 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 macrophyllus</i>)
Princess Flower	(<i>Tibouchina urvilleana</i>)
Privet	(<i>Ligustrum Indica</i>) (var. - <i>Lake Trese</i>)(<i>Ligustrum lucidum</i>) (<i>Ligustrum japonicum</i>) (<i>Ligustrum texanum</i>)
, Glossy	(<i>Dodonaea viscosa</i>)
, Japanese, Waxleaf	(<i>Pyracantha graberi</i>)
, Texas	(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</i> <i>Flame</i> , <i>Delaware Valley White</i> , <i>New</i> <i>White</i>) (<i>Rhododendron sp</i>)
Purple Hop Bush	(<i>Prunus cistena</i>)
Pyracantha	(<i>Amelanchier laevis</i>)
Rhododendron - Azalea	(var. <i>Regent</i>)(<i>Amelanchier alnifolia</i>)
Sandcherry, Purpleleaf	
Serviceberry, Allegheny	
, Saskatoon	

Silver King
Sky Flower, Brazilian
Snowball Bush
Spindle Tree
Spiraea

Star Plant, Lavender
Tea Tree, Australian
 , New Zealand

Texas Ranger
Toyon, California Holly
Trumpet Vine, Pink
Veronica
Viburnum, Japanese
 , Sandankwa
Wayfaring Tree
Weeping Fig, Exotica
Wheeler Dwarf, Variegated

Yellow Bells
Yesterday-Today-and-Tomorrow...
Yew

(*Euonymus japonica*)
(*Duranta stenostachya*)
(*Viburnum opulus sterilis*)
(*Euonymus kiautschovica*)
(*Spiraea vanhouttei*)
(var: Anthony Waterer, Froebellii, Goldflame)
(*Spiraea bumalda*)
(*Spiraea trilobata*)
(var *Snowbound*) (*Spiraea nipponica*)
(*Grewia occidentalis*)
(*Leptospermum laevigatum*)
(var. PL-dGlow)
(*Leptospermum scoparium*)
(*Leucophyllum frutescens*)
(*Heteromeles arbutifolia*)
(*Pandorea rosea*)
(*Hebe* 'Coed')
(*Viburnum japonicum*)
(*Viburnum suspensum*)
(*Viburnum lantanoides*)
(*Ficus benjamina*)
(var. - Wheeler)
(*Pittosporum tobira*)
(*Tecoma stans*)
(*Brunfelsia calycina*)
(*Taxus cuspidata*)