

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

59807-19

EPA Reg. Number:

Date of Issuance:

6/6/18

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:
Unconditional

Name of Pesticide Product:

OHP 1701B Granular

Name and Address of Registrant (include ZIP Code):

Mary Hunt Agent for OHP, Inc. c/o Exponent, Inc. 1150 Connecticut Avenue, NW, Suite 1100 Washington, DC 20036

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
- 2. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Continued on page 2

Signature of Approving Official:	Date:
Grant Rowland, Acting Product Manager 23 Herbicides Branch, Registration Division (7505P)	6/6/18

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Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSF:

Basic CSF dated 07/28/2017

If you have any questions, please contact Mindy Ondish by phone at 703-605-0723, or via email at ondish.mindy@epa.gov.

Enclosure

ISOXABEN	GROUP	21	HERBICIDE
DITHIOPYR	GROUP	3	HERBICIDE

# OHP 1701B Granular

# Ornamental and Turf Herbicide

Preemergence control of weeds in field, container and landscape ornamentals, and turfgrass.

**ACCEPTED** 06/06/2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 59807-19

Active Ingredients:

$\mathcal{E}$	
Isoxaben	0.50%
Dithiopyr	0.25%
Other Ingredients:	<u>99.25%</u>
TOTAL	100.00%

# KEEP OUT OF REACH OF CHILDREN CAUTION

See back for First Aid, and booklet for [First Aid, and] complete Directions for Use.

FIRST AID		
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment.</li> </ul>	
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	

#### **HOT LINE NUMBER**

For TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-434-9300. For MEDICAL (24 Hours A Day) and PRODUCT USE Information Call 1-800-356-4647.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

EPA Registration No.59807-19

EPA Est. No.

Net Weight: 50 lb

OHP, Inc. PO Box 746

Bluffton, SC 29910-0746

(800) 356-4647

### PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators, and other handlers must wear:

- Long sleeved shirt and long pants
- Socks and shoes
- Water proof gloves

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.

#### USER SAFETY RECOMMENDATIONS

User should:

- Remove clothing/PPE 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.

#### **ENGINEERING CONTROLS**

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides (40CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use with care when applying to turf areas adjacent to any body of water. Drift and runoff from treated turf may adversely affect aquatic organisms in adjacent aquatic sites. 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

**Ground Water Advisory:** This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

**Surface Water Advisory:** This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soil and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of isoxaben from run off water and sediment.

#### **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. 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.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to users 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, including plants, soil, or water is:

- Coveralls
- Water proof gloves
- Shoes plus socks

# NON-AGRICULTURAL 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, forest, nurseries, or greenhouses.

Do not allow unprotected persons to enter treated areas until dusts have settled.

#### PRODUCT DESCRIPTION

**OHP 1701B Granular** is for preemergence control of weeds in field, container and landscape ornamentals, and turfgrass. **OHP 1701B Granular** is a granular herbicide containing two selective herbicides that provide a broad spectrum of weed control with tolerance to many ornamental plants.

Not for sale, distribution or use in New York State.

# WEED RESISTANCE MANAGEMENT AND BEST MANAGEMENT PRACTICES Mode of Action

**OHP 1701B Granular** contains the active ingredient isoxaben, which has a cellulose biosynthesis inhibitor (CBI) mode of action (Group 21) and dithiopyr, a member of the pyridine family of herbicides (Group 3) which inhibits mitotic processes in plants. The active ingredients control susceptible weeds by preventing growth and development of newly germinated seeds. **OHP 1701B Granular** will not control established weeds.

#### To delay herbicide resistance use appropriate resistance-management strategies.

Rotate the use of products containing isoxaben and dithiopyr with other herbicides with different mechanisms of action within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds. Scout for weeds before product application for identification and growth stage and after product application to look for poor performance or likely resistance. Report any incidence of non-performance of this product against a particular weed species to your local sales representative, crop advisor, or extension agent or call OHP, Inc. at (800) 356-4647. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes as practical, with the goal of preventing further seed production.

Suspected herbicide-resistant weeds may be identified by these indicators:

- \*Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- \*A spreading patch of non-controlled plants of a particular weed species; and
- \*Surviving plants mixed with controlled individuals of the same species.

Proactively implement diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistant weeds. Scouting after herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant weed populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in reducing the spread of resistant weed seed.

Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these MOAs have been found in your region. Do not assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

#### LIST OF WEEDS CONTROLLED BY OHP 1701B GRANULAR

#### **BROADLEAF WEEDS**

Common Name Scientific Name

aster, heath Symphyotrichum ericoides
Bittercress Cardamine spp.

bittercress, little Cardamine oligosperma
bittercress, hairy Cardamine hirsuta

chickweed, mouseear Cerastium fontanum ssp. vulgare

dandelion Taraxacum officinale
eclipta Eclipta prostrata
galinsoga, hairy Galinsoga quadriradiata

galinsoga, hairy Galinsoga quadriradiata geranium, Carolina Geranium carolinianum

henbit Lamium spp.

knotweed, prostrate Polygonum aviculare ladysthumb Polygonum persicaria Iespedeza, common Lespedeza striata lettuce, prickly Lactuca serriola

mallow, common

marestail

mayweed, chamomile

medic, black

Lactuca serriola

Malva neglecta

Conyza canadensis

Anthemis cotula

Medicago lupulina

morningglory, ivyleaf
mustard
mustard
oxalis, buttercup
parsley-piert

Ipomoea hederacea
Brassica spp.
Oxalis pes-caprae
Alchemi/la arvensis

pennywort Hydrocotyle spp.
pigweed, redroot Amaranthus retroflexus
Pineappleweed Matricaria matricarioides

plantain, bracted Plantago aristata
plantain, broadleaf Plantago major
plantain, buckhorn Plantago lanceolata
pokeweed, common Phytolacca americana
purslane, common Portulaca oleracea
rocket, London Sisymbrium irio

rockpurslane, redmaids
sida, prickly

Sida spinosa

Sidymerium to Calandrinia ciliata
Sida spinosa

shepherdspurse Capsella bursa-pastoris sorrell, red Rumex acetosella

Speedwell, cornVeronica arvensisspeedwell, thymeleafVeronica serpyllifoliaspurge, gardenEuphorbia hirta

spurge, hyssop

Spurge, prostrate

Spurge, spotted

Sweetclover, yellow

Chamaesyce hyssopifolia

Euphorbia humistrata

Chamaesyce maculata

Melilotus officinalis

tansymustard, green Descurainia pinnata ssp. brachycarpa

woodsorrel, creeping Oxalis corniculata woodsorrel, yellow Oxalis stricta

#### **GRASSY WEEDS**

barley Hordeum spp.

barnyardgrass Echinochloa crus-galli

bluegrass, annual Poa annua brome Bromus spp.

crabgrass, large Digitaria sanguine/is crabgrass, smooth crabgrass, Southern Digitaria ciliaris

crowfootgrass Dactyloctenium aegyptium dallisgrass (seedling) Paspalum dilatatum goosegrass Eleusine indica foxtail, green Setaria verdi foxtail, yellow Setaria faberi

kikuyugrass Pennisetum clandestinum

oats, wild Avena fatua ryegrass Lolium spp.

(annual & perennial)

sandbur *Cenchrus spp.*smutgrass *Sporobolus indicus* 

#### CONTAINERIZED, FIELD AND LANDSCAPE ORNAMENTALS

# Restrictions for Containerized, Field and Landscape Ornamentals

**Do not** apply to moist or wet foliage of ornamentals.

**Do not** apply while plants are producing a new flush of spring growth. Tender, newly forming leaves are especially sensitive and may be injured by the herbicide.

**Do not** apply when extreme cold stress (35F or lower) is expected.

**Do not** apply product in enclosed greenhouse, polyhouse or poly-enclosed shadehouse structures containing plants as ornamental injury may result.

**Do not** apply within three weeks prior to enclosing greenhouses or poly-type structures.

Do not apply to plant types whose leaves channel the herbicide granules in the leaf base or crown area.

**Do not** apply to vegetable or edible fruit bearing crops.

**Do not** use on fruit trees that will bear fruit within one year of application. Non-bearing fruit trees are defined as trees including Citrus (oranges, grapefruit, etc), pome fruits (apples, pears, etc) and stone fruits (cherries, peaches, etc.) which will not bear fruit for at least one year following application of OHP 1701B Granular.

Do not apply to bedding plants or flowering crops except as described in the cut flower and foliage ornamental section

Do not mechanically incorporate OHP 1701B Granular into soil or potting media.

Do not graze or feed forage from treated fields to livestock.

**Do not** disturb the soil surface following application, as the herbicide barrier will be broken, resulting in less than optimum control.

Do not apply to unrooted liners or cuttings that have been planted in pots for the first time.

**Do not** apply to bare roots of ornamental plants as injury may result.

**Do not** apply to pots less than 4 inches wide.

**Do not** apply more than 150 pounds of this product (0.375 pound dithiopyr and 0.75 pound isoxaben) per acre per application.

**Do not** apply more than 300 pounds of this product (0.75 pound dithiopyr and 1.5 pounds isoxaben) per acre per year.

**Do not** reapply at less than 3 month intervals, and no more than 2 applications per crop per year.

#### **CULTURAL CONSIDERATIONS**

In order for **OHP 1701B Granular** to provide maximum preemergence weed control activity, use the following cultural practices. Prior to application, the bed or soil surface should be smooth and free of crop and weed trash (decaying leaves, clippings, dead weeds, etc.). Leaves and trash may be removed by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide application. Apply **OHP 1701B Granular** when, at least 1/2 inch of irrigation or rainfall is forecasted to occur within 24 h after

apply OHP 1701B Granular when, at least 1/2 inch of irrigation or rainfall is forecasted to occur within 24 h after application. The best results from OHP 1701B Granular are from applications to established beds or soil surfaces that are left undisturbed during the time period for which weed control is desired. Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of OHP 1701B Granular. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment.

#### APPLICATION INSTRUCTIONS

- Apply to dry foliage only.
- Water in immediately to wash the particles off the plant foliage.
- Apply 3.4 lbs. OHP 1701B Granular per 1,000 sq. ft. (see also table for more **Application Rates- Amount of 1701B Granular per Area**).
- Repeat application at 3 month intervals.

Before each application, remove any existing weeds. Apply product with a properly calibrated spreader that will assure accurate, even particle distribution. Apply to dry foliage only. To test for moisture, rub hands over plant foliage. Immediately after the application, water in with ½ inch of water to wash the particles off the plant foliage and to activate the herbicide. For season-long weed control, repeat applications are required at approximately 3-month intervals during the growing season, but do not apply more than 300 pounds **OHP 1701B Granular** per acre per year.

OHP 1701B Granular may be applied to recently transplanted and established ornamentals. Irrigation or rainfall must occur soon after application to wash residues off plant foliage and activate the herbicide. OHP 1701B Granular may be applied at any time to established plants. Delay application to allow soil or media to settle around new transplants. Apply OHP 1701B Granular after cuttings form roots and become established. Apply before budding/grafting or after buds/grafts have taken to avoid any inhibition of the tissue union. For optimum control OHP 1701B Granular should be activated by at least ½ inch of rainfall or irrigation prior to weed seed germination and within 3 days following application.

# TREATMENT OF ORNAMENTAL SPECIES NOT LISTED ON THE LABEL FOR OHP 1701B GRANULAR

When applied as directed under the conditions described on this label, ornamentals listed under the LIST OF PLANTS TOLERANT TO OHP 1701B GRANULAR section have shown tolerance in field trials. However, this product has not been tested on all cultivars of each species or under all possible growing conditions. Under your growing conditions, a limited number of plants should be treated for tolerance evaluations, prior to initiating large-scale applications. Follow directions given below to determine plant tolerance under your growing conditions prior to large scale use.

Users who wish to use OHP 1701B Granular on ornamental plant species **not listed** on this label may determine the suitability for use by treating a small number of such plants at a directed rate. Prior to treatment of large areas, the treated plants should be observed for any signs of herbicidal injury for 30 to 60 days of normal growing conditions to determine if the treatment is safe to the target plant species. To the extent consistent with applicable law, the user assumes responsibility for any plant damage or other liability resulting from use of OHP 1701B Granular on plant species not listed on this label.

#### Do Not Use This Product For Weed Control In The Following Ornamental Plant Species:

Scientific Name
Ajuga spp.

Common Name
bugleweed or ajuga

Brassica spp. mustard

Echinacea purpurea purple coneflower Euonymus alatus 'Compacta' dwarf burning bush Euphorbia spp. spurge

Hydrangea spp. hydrangea
Iberis spp. candytuft

Juniperus horizontalis 'Prince of Wales' Prince of Wales juniper

Melaleuca quinquenervia cajeput tree

Rhododendron caroliniaum Carolina rhododendron

Rhododendron catawbiense 'Roseum elegans' roseum elegans rhododendron

Sedum spp.stonecropYucca recurvifoliagreen yucca

### **CONTAINER GROWN ORNAMENTALS**

Apply **OHP 1701B Granular** prior to weed seed germination in the early spring or fall or following a complete weed removal. Repeat application at a 3 month interval (maximum residual) during the growing season. For application in the fall, apply 3 weeks prior to placing plants in an empty, enclosed greenhouse or hoop house structure.

Apply **OHP 1701B Granular** at 150 pounds per acre per application. A maximum of two applications may be made per year. Do not reapply at less than 3 month intervals for container grown ornamentals. Do not apply OHP 1701B Granular to newly transplanted ornamentals, nursery stock, groundcovers, or ornamental bulbs until potting soil or potting media has settled around the roots. Use of hand packing, irrigation or rainfall will aid in the settling of media. Failure of soil settling or cracks in the soil media will risk plant injury.

Where runoff water is recycled, care must be taken to locate pump intake line opening(s) close to the collection pond surface to avoid disturbing and recirculating clay fractions/organic matter accumulation near the pond bottom. This debris/settlement may contain amounts of previously applied pesticides tied-up on clay/organic matter fractions and may lead to plant injury.

**Potted Liners:** Start with clean liners; after planting and before **OHP 1701B Granular** application, irrigate with water to firm potting media around root systems. Allow foliage to dry. Broadcast **OHP 1701B Granular** evenly over growing area of containers. Water again after application with approximately ½ inch of water.

**Bare-root liners:** Start with clean liners; broadcast **OHP 1701B Granular** evenly over growing area of containers 3 weeks after potting. Water after application with approximately ½ inch of water.

APPLICATION RATES		
Amount of OHP 1701B Granular	Per AREA	
0.055 oz	1 square foot	
5.5 oz	100 square feet	
3.44 lbs	1000 square feet	
150 lbs	Acre	

1 ounce = 28 grams (g)

# FIELD GROWN ORNAMENTALS

Apply **OHP 1701B Granular** at 150 pounds per acre per application. Apply immediately after planting or in the spring prior to weed seed germination or weed removal. A maximum of two applications may be made per year. Do not reapply at less than 3 month intervals for field grown ornamentals. **OHP 1701B Granular** is not recommended for use on transplanted bare root stock if irrigation is not available.

#### LANDSCAPE ORNAMENTALS

OHP 1701B Granular has been tested on ornamental crops for use in landscapes and are listed in the section titled: LIST OF CROPS TOLERANT TO OHP 1701B GRANULAR.

OHP 1701B Granular is not registered for use on vegetables or edible fruit bearing crops or bedding plants. Apply at 150 pounds per acre. After planting and before OHP 1701B Granular application, remove established weeds. Irrigate with water to settle and firm up soil around roots. Broadcast OHP 1701B Granular evenly over growing area lweek after planting. Water after application with approximately ½ inch of water and do not disturb soil. Loosen soil with light cultivation prior to reapplication of OHP 1701B Granular.

#### **CUT FLOWER AND FOLIAGE CROPS**

Unless excluded under specific crops below, follow all use directions listed on the label. Apply **OHP 1701B Granular** prior to weed seed germination and or after a complete removal of weeds. After planting and prior to **OHP 1701B Granular** application, irrigate with water to firm soil around plant roots. Allow foliage to dry completely prior to application to prevent granules from sticking. Evenly broadcast **OHP 1701B Granular** over production area at the directed rate. Irrigate with ½ inch of water immediately after application to activate and remove any granules that may be on foliage. Do not reapply at less than 3 month intervals.

#### INDIVIDUAL CONTAINER APPLICATIONS

For situations where broadcast application of the product is not appropriate, apply the product uniformly over the entire container surface at the rates on the following table:

APPLICATION RATES		
Amount of OHP 1701B Granular	Per AREA	
0.055 oz	1 square foot	
5.5 oz	100 square feet	
3.44 lbs	1000 square feet	
150 lbs	Acre	

 $<sup>1 \</sup>text{ ounce} = 28 \text{ grams (g)}$ 

#### LIST OF PLANTS TOLERANT TO OHP 1701B GRANULAR

\* Not for use in California

#### **Trees**

Scientific Name	Common Name
*Abies balsamea	balsam fir
*Abies concolor	white or concolor fir
*Abies fraseri	fraser fir
*Abutilon hybridum	albus-flowering maple
	luteus-flowering maple
	roseus-flowering maple
	tangerine-flowering maple
	vesuvius red-flowering maple
*Acer ginnala	flame maple
*Acer japonicum	Japanese maple
*Acer platanoides	Norway maple
Acer rubrum	red maple
	*red sunset maple
Acer saccharinum	silver maple
Acoelorrhaphe whrightii	Everglades palm
*Albizia julibrissin	silk tree
*Alsophila australis	Australian tree fern
Archontophoenix cunninghamiana	king palm
Areacastrum romanzoffianum	queen palm
*Araucaria heterophylla	Norfolk island pine
*Bauhinia galpinii	red bauhinia
Betula nigra	river birch

- \*Betula papyrifera
- \*Betula pendula
- \*Brachychiton populneus
- \*Bucida buceras
- \*Ceratonia siliqua
- \*Cercis canadensis
- \*Chamaecyparis obtusa
- \*Chamaecyparis pisifera
- \*Chamaedorea cataractarum
- \*Chamaedorea costaricana \*Chamaedorea elegans Chamaerops humilis Cornus florida
- \*Cornus kousa
- \*Crataegus spp.
- \*Crataegus viridis
- \*Cryptomeria japonica
- \*Cupaniopsis anacardioides
- $*Cup ressus\ arizonicus\ or\ glabra$
- \*Cupressus ariz 'Blue Pyramid'

Cupressocyparis leylandii 'Emerald Isle' Cupressocyparis leylandii 'Naylor's Blue'

Cupressus sempervirens

Cupressus sempervirens 'Glauca'

Cycas revoluta

- \*Elaeagnus angustifolia
- \*Elaeagnus x ebbengei 'Gilt edge'
- \*Eucalyptus camaldulensis
- \*Eucalyptus cinerea
- \*Eucalyptus citriodora
- \*Eucalyptus microtheca
- \*Eucalyptus sideroxylon
- \*Fagus sylvatica
- \*Ficus benjamina
- \*Ficus retusa
- \*Fraxinus americana
- \*Fraxinus pennsylvanica
- $*Fraxinus\ udhei$
- \*Ginkgo biloba
- \*Gleditsia triacanthos var. inermis
- \*Gleditsia triacanthos var. inermis
- \*Heteromeles arbutiflora
- \*Illicium floridanum

Juniperus virginiana

- \*Leptospermum scoparium
- Liquidambar styraciflua

paper birch

European white birch

bottle tree black olive

carob redbud

filicoides-fernspray cypress

gracilis-slender hinoki cypress

sawara-false cypress squarrosa-moss cypress

cat palm palm palm

parlor palm

Mediterranean fan palm \*cloud nine dogwood flowering dogwood kousa dogwood Cockspur White Crimson Cloud enchantress Jack Evans Washington white

green hawthorn

Japanese cryptomeria

carrot wood Arizona cypress blue pyramid cypress

Emerald isle leyland cypress Naylor's blue leyland cypress

Italian cypress glauca Italian cypress

sago palm Russian olive gilt edge elaegnus red gum eucalyptus mealy eucalyptus silver dollar eucalyptus

gum

coolibah tree

red ironbark eucalyptus

European beech

ficus mini ficus ficus, nitidia purple ash green ash shamel ash

ginkgo (maidenhair tree) thornless honeylocust shademaster honeylocust

toyon

Florida anise-tree Eastern redcedar New Zealand tea tree

ruby glow New Zealand tea tree

American sweetgum

\*Magnolia grandiflora
\*Magnolia soulangeana
\*Magnolia stellata
\*Malus pumila
\*Malus sargentii
\*Morus alba
\*Musa aluminata
Oxydendrum arboretum
Picea abies

Picea glauca

Picea glauca 'Conica'

Picea pungens

\*Picea pungens 'Glauca' \*Picea pungens 'Hoopsia' \*Picea pungens 'Koster'

\*Pinus aristata
\*Pinus canariensis
\*Pinus contorta
\*Pinus eldarica
\*Pinus elliotfii
\*Pinus leucodermis
\*Pinus palustris

Pinus mugo var. pumilio

Pinus nigra \*Pinus radiata Pinus strobus

#### Pinus sylvestris

\*Pinus taeda
Pinus thunbergii
\*Pinus virginiana
\*Platanus occidentalis
\*Platanus racemosa
\*Podocarpus spp.
\*Populus deltoides
\*Prosopis chilensis
\*Prunus yedoensis
\*Prunus caroliniana

\*Prunus laurocerasus
\*Quercus ilicifolia
\*Quercus laurifolia
Quercus palustris
Quercus phellos
Quercus rubra
Quercus virginiana
\*Ravenea rivularis
\*Salix babylonica

\*Salix matsudana 'Torulosa' \*Sequoiadendron giganteum \*Sequoia sempervirens \*Sorbus aucuparia

\*Swietenia mahogani

Southern magnolia saucer magnolia royal star magnolia

apple

crabapple non-bearing white mulberry

banana sourwood

\*pendula-weeping Norway spruce \*repens-spreading Norway spruce

Norway spruce white spruce dwarf Alberta spruce Colorado spruce Colorado blue spruce hoopsia blue spruce koster blue spruce bristlecone pine Canary Island pine

shore pine, beach pine eldarica pine slash pine Bosnian pine longleaf pine pumilio mugo pine \*mugo pine

Austrian black pine
Monterey pine
Eastern white pine
white pine

columnar Scotch pine

Scotch pine loblolly pine Japanese black pine Virginia pine American sycamore California sycamore

podocarpus cottonwood Chilean mesquite yoshino flowering cherry Carolina laurel cherry

bright 'n tight Carolina laurel cherry

English laurel bear oak laurel oak pin oak willow oak red oak live oak majesty palm

Babylon weeping willow

corkscrew willow giant sequoia coast redwood mountain ash mahogany

\*Syagrus romanzoffianum \*Tabebuia caraiba \*Taxodium distichum Trachycarpus fortunei Tsuga canadensis \*Ulmus parvifolia

Washingtonia robusta \*Zamia furfuracea

#### Shrubs

\*Abelia x grandiflora

\*Acacia abyssinica
\*Acacia redolens
\*Acacia stenophylla
Acalypha wilkesiana
\*Acer ginnala
\*Acer palmatum
\*Acer palmatum

\*Agave americana
\*Amelanchier alnifolia
\*Andromeda polifolia

\*Anisodontea hypomandarum Arctostaphlos uva-ursi

\*Ardisia japonica

\*Armeria maritima 'Bloodstone'

\*Artemesia lactiflora
\*Athyrium nipponimcum
\*Aucuba japonica 'Goldstrike'

Baccharis pilularis
\*Berberis x gladwynensii
\*Berberis mentorensis
\*Berberis thunbergii 'Aurea'

\*Berberis thunbergii var. atropurpurea

'Crimson Pygmy'

Berberis thunbergii var. atropurpurea 'Rose Glow' Berberis thunbergii var. atropurpurea

\*Berberis thunbergii var. atropurpurea

'Cherry Bomb' Bougainvillea spp.

\*Bougainvillea 'Purple Queen'

\*Bougainvillea 'Rosenka'

\*Buxus microphylla var. japonica 'Green Beauty'

Buxus microphylla var. japonica \*Buxus microphylla var. Koreana

Buxus sempervirens \*Buxus x 'Green velvet' Callistemon citrinus queen palm Yellow tab bald cypress windmill palm Eastern hemlock Chinese elm drake elm Mexican fan palm cardboard palm

Edward goucher abelia

glossy abelia

sunrise variegated abelia

nana

abelia, dwarf abyssinica acacia prostrate acacia shoestring acacia copper leaf amur maple

coral bark Japanese maple dwarf Japanese maple

century plant

Saskatoon serviceberry

bog rosemary cape mallow bearberry

chirimen marlberry bloodstone sea thrift white mugwort Japanese painted fern Japanese laurel coyote bush

William Penn barberry mentor barberry

golden Japanese barberry

crimson pygmy barberry rose glow red barberry red leaf Japanese barberry

cherry bomb barberry Barbara karst California gold pink pixie Scarlet O'Hara temple fire Texas dawn

purple queen bougainvillea rosenka bougainvillea green beauty boxwood Japanese little leaf boxwood

Korean boxwood common boxwood green velvet boxwood lemon bottlebrush

- \*Callistomen citrinus 'Little John'
- \*Callistemon viminalis
- \*Calluna vulgaris

Camellia japonica

- \*Caryopteris clandonensis
- \*Caryopteris x clandonen 'Blk night'
- \*Cassia artemisioides
- \*Cassis, eremophila
- \*Ceanothus spp.
- \*Cephalotaxus harringtonia var. drupacae
- \*Cerastium tomentosum
- \*Ceratostigma plumbaginoides
- \*Ceratosigma willmottianum

Chaenomeles japonica

- \*Chamaecyparis obtusa
- \*Chamaecyparis pisifera
- \*Chrysalidocarpus lutescens
- \*Clethra alnifolia
- \*Cleyera japonica
- \*Colonema pulchrum
- \*Convolvus cneorum
- \*Convolvulus mauritanicus
- \*Cornus alba

Cornus sericea

- \*Corylus americanus 'Contorta'
- \*Cotinus coggygria
- \*Cotinus dammeri
- \*Cotoneaster adpressus
- Cotoneaster apiculatus
- \*Cotoneaster congestus
- \*Cotoneaster dammeri
- \*Cotoneaster himalayan
- \*Cotoneaster horizontalis
- Cycas revoluta
- \*Cyrtomium fortunei
- \*Cytisus praecox
- \*Cytisus scoparius
- \*Cytisus spp.
- \*Dalea greggii
- \*Daphne cneorum
- \*Daphne odora
- \*Deutzia crenata
- \*Deutzia gracilis
- \*Dodonea viscosa
- \*Enkianthus companulatus
- \*Elaeagnus pungens
- \*Erica cinerea

- little John lemon bottlebrush
- weeping bottlebrush
- spring torch Scotch heather
- camellia
- blue mist bluebeard
- dark knight bluebeard
- feathery cassia
- senna
- wild lilac
- Japanese plum yew
- snow-in-summer
- dwarf plumbago
- Chinese plumbago
- orange flowering quince
- kosteri cypress
- nana-dwarf hinoki cypress
- torulosa cypress
- baileyi-dogwood
- flaviramea-dogwood
- sawara-false cypress
- squarrosa minima cypress
- filifera-thread cypress
- areca palm
- summersweet
- Japanese cleyera
- pink breath of heaven
- bush morning glory
- ground morningglory
- sibirica-Siberian dogwood
- baileyi redosier dogwood
- flaviramea vellowtwig dogwood
- Harry Lauder's walking stick
- royal purple smoke tree coral beauty smoke tree
- eichholz smoke tree
- praecox-early cotoneaster
- cranberry cotoneaster
- Pyrenees cotoneaster
- bearberry cotoneaster
- Himalayan cotoneaster
- rock cotoneaster
- sago palm
- holly fern
- hollandia-warminster broom
- lena-Scotch broom
- holandia-Scotch broom
- allgold warminster broom
- lilac time broom
- trailing indigo bush
- rose daphne
- fragrant daphne
- nakiana-dwarf deutzia
- slender gracilis
- hopseed bush
- red-veined enkianthus fruitland silver berry
- purple bell heather

\*Erica vagans

\*Erica x darleyensa Escalonia spp.

\*Eugenia myritifolia

\*Eugenia myrtifolia 'Globulus'

Euonymus fortunei

\*Euonymus japonicus

\*Euonymus kiatschovicus

\*Euonymus kiatschovicus 'Manhattan'

\*Euonymus vegetus \*Fatsia japonica \*Feijoa sellowiana \*Felicia amelloides Forsythia x intermedia

Forsythia x 'Spring glory' \*Fuchsia x "Santa Claus' Gardenia jasminoides

\*Gaultheria procumbens

\*Gaultheria shallon

\*Gelsemium sempervirens

Genista pilosa

\*Hamamelis virginiana \*Hardenbergia violacea

\*Hebe buxifolia

\*Hibiscus rosa-sinensis

\*Hibiscus spp.

\*Hibiscus syriacus

\*Ilex aquifolium

\*Ilex x aquipernyi Ilex x attenuata \*Ilex cassine Ilex cornuta

Ilex crenata

cornish heather

Mediterranean pink heather

escallonia

teenie genie brushcherry dwarf brush cherry

\*canadale gold euonymus emerald 'n gold euonymus \*sunspot euonymus silver king euonymus chollipo euonymus gold spot euonymus

silver princess euonymus variegated evergreen euonymus

spreading euonymus
Manhattan euonymus
bigleaf wintercreeper
Japanese aralia
Pineapple guava
blue marguerite
border forsythia
Arnold dwarf

spring glory forsythia Santa Claus fuchsia \*August beauty gardenia

\*gardenia

\*miniature gardenia

\*mystery
radican gardenia
wintergreen
salal-lemon leaf
Carolina jessamine
woadwaxen

woadwaxen

common witch hazel

lilac vine boxleaf hebe ross estey-hibiscus

blue bird brilliant hula girl

red bird rose of sharon red heart rose of sharon woodbridge rose of sharon Balkans English holly gold coast English holly

San Jose holly Savannah holly cassine holly burford holly \*dwarf burford holly \*needlepoint holly \*Chinese holly

Japanese holly

\*compacta-dwarf Japanese holly

\*convexa holly
\*dwarf Chinese holly
\*green luster holly

\*helleri-heller's Japanese holly

\*Ilex crenata 'Steeds'

\*Ilex glabra
\*Ilex glabra
Ilex x meserveae

Ilex x 'Nellie Stevens'

\*Ilex opaca Ilex spp. Ilex vomitoria

\*Itea virginica \*Ixora collinea

\*Juniperus chinensis 'Gold Coast'

Juniperus chinensis

Juniperus conferta

\*Juniperus davurica Juniperus horizontalis

\*Juniperus procumbens \*Juniperus prostrata Juniperus sabina

\*Juniperus scopulorum

Juniper spp.

Juniperus squamata

Kalmia latifolia Lagerstroemia indica \*Leucophyllum frutescens \*Leucophyllum laevigatum \*Leucothoe axillaris Leucothoe fontanesiana \*hetzii's Japanese holly steeds Japanese holly stokesii Japanese holly

compacta-compact inkberry holly

nordica-inkberry holly blue boy holly blue girl holly \*China boy holly China girl holly \*ebony magic holly Nellie R. Stevens holly

American holly

holly

\*nana-dwarf yaupon holly \*pendula-weeping yaupon holly

yaupon holly

Henry's garnet sweetspire

ixora

gold coast juniper \*hollywood juniper \*media-old gold juniper

\*pfitzer juniper

\*pfitzerana glauca-blue juniper pfitzerana-pfitzer juniper \*sea green juniper

\*torulosa-hollywood juniper emerald sea shore juniper

\*shore juniper
parsonii juniper
\*andorra juniper
bar harbor juniper
blue chip juniper
blue rug juniper
\*creeping juniper
\*dwarf andorra juniper
\*huntington blue juniper
\*plumosa-andorra juniper
\*wiltonii-blue carpet juniper
nana-dwarf Japanese garden juniper

prostrata juniper broadmoor juniper \*foemina-hicks juniper

\*savin juniper

\*tamariscifolia-tam juniper emerald green juniper wichita blue juniper

juniper
\*blue juniper
blue star juniper
parsonii juniper
mountain laurel
crape myrtle
Texas sage
chihuahan sage
coast leucothoe
drooping leucothoe
fetterbush, rain

Ligustrum japonicum

Ligustrum lucidum
\*Ligustrum ovalifolium
\*Ligustrum texanum

\*Ligustrum x vicaryi golden \*Ligustrum vulgare 'Lodense'

\*Livistona chinensis
\*Lonicera fragrantissima
\*Lonicera japonica

\*Lonicera periclymenum

\*Lonicera sempervirens \*Lorpetalum chinense

\*Loropetalum chinense var. rubrum 'Razzlebern'

\*Mahonia aquifolium 'Compactum'

\*Mahonia bealei \*Mahonia repens

\*Mandevilla splendens 'Red Riding Hood'

\*Michelia figo

\* Myrica caiifornica

\*Myrica cerifera

\*Myrica pennsylvanica

\*Myoporum parvifolium
Nandina domestica

Nerium oleander

\*Osmanthus x fortunei \*Osmathus fragrans

Pennisetum setaceum 'Rubrum'

\* Philadelphus spp

\*Phoenix roebelenii Photinia x fraseri \*Physocarpus opulifolius

Pieris japonica

\*Pieris x 'Forest Flame'
Pinus mugo var. mugo

\*Pittosporum tenufolia 'Golf Ball'

Pittosporum tobira

Japanese privet
wax privet
yellow tip privet
glossy privet
California privet
Howard privet
wax leaf privet
vicary privet

lodense common privet Chinese fountain palm winter honeysuckle claveysis dwarf

halliana

tatarian Canadian

white

flowering woodbine serotina woodbine trumpet honeysuckle sizzling pink fringe flower razzleberri fringe flower

dwarf Oregon hollygrape mahonia

leather leaf mahonia creeping mahonia

red riding hood mandevilla

banana shrub wax myrtle

Southern wax myrtle

bayberry putah creek

compacta-dwarf heavenly bamboo \*harbour dwarf-heavenly bamboo heavenly bamboo (nandina) nana compacta-heavenly bamboo \*nana purpurea-heavenly bamboo \*woods dwarf-heavenly bamboo

hardy red oleander

oleander

\*ruby lace oleander fortune's osmanthus sweet olive osmanthus purple fountain grass

golden

snowflake double white pigmy date palm fraser photinia dwarf ninebark lily-of-the-valley

\*mountain fire lily-of-the-valley
\*snowdrift lily-of-the-valley
\*temple bells lily-of-the-valley
\*valley rose lily-of-the-valley
\*valley valentine lily-of-the-valley
forest flame lily-of-the-valley

mugo pine

golf ball pittosporum green pittosporum

\*wheeler's dwarf pittosporum

\*Plumbago ariculata
\*Plumbago capensis
\*Podocarpus macrophyllus
\*Polygala fructicosa

\*Polystichum polyblepharum \*Potentilla fragiformis Potentilla fruticosa

Potentilla spp.
\*Potentilla verna
\*Prunus gladulosa
\*Prunus glandulosa

\*Prunus laurocerasus 'Otto luykens'

\*Psidium cattleianum

\*Pyracantha coccinea 'Lalandei'

\*Pyracantha fortuneana

\*Pyracantha koidzumii

\*Rhaphiolepis indica

\*Rhaphiolepsis indica 'Ballerina'

\*Rhaphiolepis ovata

Rhododendron calendulaceum

\*Rhododendron campylocarpum Rhododendron carolinianum x daurium Rhododendron catawbiense

Rhododendron caucasium x ponticum

\*Rhododendron exbury

\*Rhododendron forrestii repens

\*Rhododendron forrestii x griersonianum

\*Rhododendron griffithianum \*Rhododendron hybrid spp.

\*Rhododendron impeditum

blue cape plumbago

plumbago yew pine sweet pea shrub tassel fern cinquefoil cinquefoil

\*gold drop pontentilla
\*goldfinger potentilla
\*red ace potentilla
\*sunset potentilla
\*tangerine potentilla
cinquefoil
spring cinquefoil
Flowering Almond
dwarf flowering almond

\*floppy disc cinquefoil

strawberry guava lalandei firethorn

lolendei monrovia pyracantha

otto luykens English laurel

monon pyracantha
red elf hybrid pyrcantha
Rutgers hybrid pyracantha
Santa Cruz pyracantha
victory pyracantha

gnome lalandei victory

charisma-monruce rhaphiolepis enchantress-moness rhaphiolepis rhaphiolepis (India hawthorn) springtime-monme rhaphiolepis ballerina Indian hawthorn roundleaf rhaphiolepis \*cannon's double azalea

flame azalea
\*golden flare azalea
\*klondike azalea
butterfly rhododendron
PJM rhododendron

\*catawba album rhododendron catawba rhododendron \*Lord Roberts rhododendron \*rocket rhododendron

cunningham white rhododendron

cannon's double azalea golden flare azalea klondike azalea

gomer waterer rhododendron Elizabeth rhododendron Jean Marie rhododendron America rhododendron English roseum rhododendron nova zembla rhododendron scintillation rhododendron

rhododendron

\*Rhododendron indica

\*Rhododendron kaempferi Rhododendron kerume

Rhododendron maximum
\*Rhododendron mucronulatum
\*Rhododendron obtusum
\*Rhododendron ponticum

\*Rhododendron racemosum

\*Rhododendron sassthigiatim x carolinianum

\*Rhododendron satuski

Rhododendron spp.

\*Rhus lancea \*Rhus typhina

\*Rosa x 'Flower carpet'

\*Rosa rugosa

Rosmarinus officinalis Senecio cineraria \*Skimmia japonica \*Skimmia revesiana

\*Solanum rantonetii 'Royal purple'

\*Spirea spp.

Spiraea x bumalda 'Anthony Waterer'

\*Spiraea x cinerea 'Grefsheim'

Spiraea japonica

Spiraea x vanhouttei \*Streptosolen jamesonii \*Syringa rothomagenesis

\*Syringa vulgaris Taxus cuspidata formosa azalea waucabusa azalea blue danube azalea \*coral bells azalea hino crimson azalea \*hino pink azalea \*Mildred azalea \*snow azalea rhodie max (rosebay) rhododendron hino crimsom azalea chioniodes rhododendro

chioniodes rhododendron daphinoides rhododendron

dwarf scarlet wonder rhododendron

tribly rhododendron unique rhododendron vulcan rhododendron ramapo rhododendron gumpo pink azalea higasa azalea reijn azalea

hybrids carror azalea fashion azalea

\*gerard Christina azalea
\*girard Roberta azalea
\*golden flare exbury azalea
\*helmut vogel azalea
hershey red azalea
\*hot shot azalea
\*hume azalea
\*Inga azalea

\*Irene Koster azalea
\*kirishima azalea
\*President Clay azalea
\*traditional azalea
African sumac
staghorn sumac
red groundcover rose

ramanas rose rosemary dusty miller Japanese skimmia reeve's skimmia Paraguay nightshade garland spirea

Anthony Waterer spirea first snow spirea

dolchia spirea

\*Japanese alpine spirea \*magic carpet spirea \*neon flash spirea \*shirobana spirea vanhoutte spirea marmalade bush Chinese lilac common lilac Japanese yew

\*Tecomaria capensis

\*Ternstroemia gymnanthera

\*Teucrium fruticans \*Thevetia nerifolia Thuja occidentalis

Thuja orientalis aureus

\*Tibouchina urvilleana

\*Vaccinium spp.

\*Veitchia merrilli

\*Viburnum bodnantense

\*Viburnum carlesii

\*Viburnum davidii

\*Viburnum japonicum

\*Viburnum judd (V. x juddii)

\*Viburnum lantana

Viburnum opulus sterile \*Viburnum plicatum var. tomentosum

\*Viburnum setigerum

\*Viburnum tinus 'Compactum'

Viburnum trilobum

\*Viburnum trilobum 'Compactum'

\*Viburnum x pragense

\*Weigela florida bristol

Xylosma congestum

\*Xylosma senticosa

\*Yucca filamentosa

# **Groundcovers/Perennials**

Achillea spp.

 $*A chille a\ filipendulina$ 

\*Achillea millefolium

\*Achillea millefolium 'Paprika'

\*Achillea tomentosa

Agapanthus africanus

Agapanthus 'Peter pan'

Ammophila breviligulata

\*Aptenia cordifolia

Aquilegia x 'Dragon fly'

\*Arctotheca calendula

\*Argyranthemum frutescens 'Butterfly'

Asparagus spp.

cape honeysuckle

Japanese ternstroemia

bush germander

yellow oleander

\*emerald arborvitae

\*globosa-globe arborvitae

\*little giant-dwarf arborvitae

nigra-dark American arborvitae

pyramidalis arborvitae

\*rheingold arborvitae

techny arborvitae

woodwardii arborvitae

nana-dwarf golden arborvitae

\*minima glauca-dwarf arborvitae

princes flower

blue crop

blue jay

Jersey

North blue

northland

Christmas palm

pink dawn viburnum

Korean spice viburnum

David viburnum

David viburiluin

Japanese viburnum

Judd viburnum

wayfaringtree viburnum

common snowball viburnum

doublefile viburnum tea viburnum

spring bouquet viburnum

Am. cranberrybush viburnum

dwarf Am. cranberrybush viburnum

Prague viburnum

ruby weigela

java red weigela

minuet weigela

xylosma

shiny xylosma

Adam's needle yucca

yarrow

moonshine-fern/leaf yarrow

common yarrow

paprika yarrow

wooly yarrow

lilly of the nile

\*queen anne lily of the nile

lily of the nile

beechgrass

red apple aptenia

columbine

cape weed

butterfly argyranthemum

Asparagus fern

\*Aspidistra elatior \*Aster novae-angliae \*Aster novi-belgii

\*Aster novi-belgii 'Persian rose'

\*Bergenia cordifolia

\*Bidens ferulifolia 'Peters gold' \*Brachycome x 'New amethyst'

 $Call is tepheus\ chinens is$ 

\*Carex albula Carex spp.

Carpobrotus edulis

\*Catharanthus roseus

\*Chasmanthium latifloium

\*Chrysanthemum maximum

\*Chrysanthemum spp.

\*Clivia miniata 'French hybrid'

\*Cordyline indiyisa \*Coreopsis verticillata

Coreopsis verticillata 'Moonbeam'

Cortaderia selloana \*Cuphea hyssopifolia \*Cyperus albostriatus \*Dahlia hybrid Dwarf

\*Dahlia x 'Royal Dahlietta pink'

\*Delosperma alba \*Delosperma cooperi \*Delosperma nubigenum Descampsia caespitosa

\*Dianthus gratianopolitanus 'Firewitch'

\*Dianthus gratianopolitanus 'Treasure'

\*Dianthus plumaris \*Dietes vegeta

\*Drosanthemum floribundum
\*Drosantheumum hispidum
\*Dryopteris erythrosora
\*Dryopteris marginalis
\*Dryopteris x australis
\*Dymondia margaritae
\*Ensete ventricosum
\*Equisetum scirpoides
\*Erianthus ravennae

\*Erigeron speciosum 'Darkest of all'
\*Euryops pectinatus 'Munchkin'
\*Eustoma grandiflorum 'Pink'
\*Evolvulus nuttallianus
\*Fatshedra japonica
Festuca ovina glauca
Gaillardia x grandifloria

\*Gaillardia x grandiflora 'Goblin'

\*Galium ordoratum \*Gazania spp.

\*Geranium cinerium "Ballerina" \*Geranium sanquineum 'Bloody cran'

\*Geranium subcaulescens

\*Geum spp \*Geum quellyon \*Gypsophila paniculata cast iron plant New England aster New York aster

Persian rose dwarf aster heartleaf bergenia Peter's gold bidens

swan river daisy new amethyst

China aster frosty curls sedge variegated carex largeleaf ice plant Madagascar periwinkle northern sea oats shasta daisy

chrysanthemum species

kafir lily blue dracaena threadleaf coreopsis moonbeam coreopsis pampas grass

false or Mexican heather dwarf umbrella grass

dwarf dahlia

dwarf dahlia wendy pink

white iceplant ice plant hardy ice plant descampsia

firewitch cheddar pink

crimson treasure cheddar pink

cottage pink fortnight lily

trailing rosea iceplant

iceplant
autumn fern
marginal wood fern
dixie wood fern
diamond marguerite
absynnian banana
dwarf horsetail
hardy pampasgrass
darkest of all fleabane

dwarf euryops pink lisianthus blue daze Japanese aralia blue fescue blanket flower goblin blanket flower

galium gazania

ballerina cranesbill bloody cranesbill

black eyed magenta cranesbill

avens geum baby's breath

- \*Hakonechloa macroaureola
- \*Hedera canariensis

Hedera helix

- \*Helichrysum petiolare 'White licorice'
- \*Heliotropium fragrans

Hemerocallis spp.

- \*Hesperaloe parvifolia
- \*Heuchera x 'Bressingham'
- \*Heuchera micrantha
- \*Hosta 'Francee'
- \*Hosta fortunei

Hosta lancifoila

- \*Hosta x 'Patriot'
- \*Houttuynia cordata 'Chameleon'
- \*Hymenoxys acaulis
- \*Hypericum spp.
- \*Imperata cylindrical 'Rubra'
- \*Ipomea acuminata 'Blue dawn'

Iris pumila 'Yellow'

Iris siberica

- \*Iris spp.
- \*Jasminum nitidum
- \*Jasminum polyanthum
- \*Kniphofia uvaria 'Flamenco'
- \*Lampranthus spectabilis
- \*Leptospermum scoparium
- \*Liatris spicata 'Floristan Violet'
- \*Limonium perezii
- \*Liriope gigantea
- \*Liriope muscari

#### \*Liriope spicata

Lonicera japonica

- \*Lysimachia mummularia
- \*Lysimachia punctata
- \*Matteuccia struthiopteris
- \*Matthiola incana 'Harmony'
- \*Miscanthus sinensis
- \*Miscanthus sinensis 'Gracillimus'
- \*Moraea iridioides
- \*Oenothera missouriensis
- \*Oenothera speciosa "Siskiyou pink'
- \*Onoclea sensibilis Ophiopogon japonicus
- \*Origanum libanoticum
- \*Osmunda cinnamomea
- \*Osmunda regalis

golden hakonechloa

Algerian ivy

English ivy

white licorice helichrysum

common heliotrope

daylily

red yucca

bressingham coral bells

coral bells

francee plantain lily

plantain lily

albo-marginata hosta

\*narrow leafed plantain lily

\*zebelli red hosta

patriot plantain lily

chameleon houttuynia

angelita daisy

St. Johnswort

Japanese blood grass

blue dawn morning glory

yellow dwarf bearded iris

iris

dwarf blue.

wedgewood

angelwing jasmine

pink jasmine

flamenco red hot poker

trailing iceplant

broom teatree/manuka

floristan violet gay feather

statice

white lily turf

giant lily turf

lilac beauty lily turf

majestic lily turf

monroe white lily turf

silvery sunproof lily turf

variegated liriope lily turf

big blue lily turf

green/creeping lily turf

silver dragon lily turf

Japanese honeysuckle

moneywort

dotted loosestrife

ostrich fern

stock

eulalia grass

maiden grass

African iris

ozark sundrops

siskiyou evening primrose

sensitive fern

dwarf mondo grass

mondo grass

oregano

cinnamon fern

royal fern

Osteospermum fruticosum Pachysandra terminalis

\*Pachysandra terminalis 'Green sheen'

\*Parthenocissus quinguefolia \*Pennisetum alopecuroides \*Pennisetum setaceum

\*Penstemon x 'Apple blossom'

Pentas lanceolata Perovskia atriplicifolia Phalaris arundinacea picta

\*Phlox subulata

\*Phormium tenax 'Jack Spratt' \*Polystichum acrostichoides \*Polystichum polyblepharum

\*Ratbida columnifera Rudbeckia fulgida \*Ruscus hypophyllum \*Salvia daghestanica \*Salvia grahamii \*Sasa pygmaea \*Scutellaria resinosa Trachelospermum asiaticum

\*Tulbaghia violacea

\*Vinca major Vinca minor

\*Verbena rigida

trailing African daisy Japanese spurge

green sheen Japanese spurge

Virginia creeper fountain grass

chrimson fountain grass apple blossom penstemon

star clusters Russian sage ribbon grass moss pink

Jack Spratt New Zealand flax

Christmas fern tassel fern Mexican hat blackeyed susan

butcher's broom (Israeli ruscus)

platinum sage graham's sage dwarf bamboo skull cap Asian jasmine society garlic veined verbena bigleaf periwinkle dwarf periwinkle

#### **TURFGRASS**

#### **Restrictions for Turfgrass Use**

- Do not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.
- **Do not** use this product on golf greens.
- **Do not** apply this product to Colonial bentgrass.
- Do not use clippings from treated turf for mulching around edible plants of herbs, vegetables, fruit bearing trees, cane berries or vine bearing fruit.
- Do not allow domestic animals to feed or forage on the treated turf or clippings from treated turf.
- Do not apply more than 200 pounds of this product (0.5 pound dithiopyr and 1 pound isoxaben) per acre per application and no more than 3 applications per year.
- Do not apply more than 600 pounds of this product (1.5 pounds dithiopyr and 3 pounds isoxaben) per acre per year.

OHP 1701B Granular provides season-long control of crabgrass and control or suppression of other listed annual grasses and broadleaf weeds in established lawns and ornamental turfs, (including golf course fairways, roughs, and tee boxes). This product will prevent germination of annual bluegrass. This product may be used on seeded, sodded, or sprigged turfgrass that is well established. Allow the turf to develop a good root system and uniform stand before application.

OHP 1701B Granular may be applied as a single application or as a split application in the spring, summer or fall. Apply OHP 1701B Granular at 150-200 pounds per acre per application in early spring, late summer to early fall, or any time prior to weed seed germination or to control crabgrass prior to the 3 leaf stage of growth or first tiller. This product will not control established weeds, except for crabgrass in early stages of development. Used as directed, this product will control or suppress the annual grass and broadleaf weeds listed on this label when applied prior to their emergence. Use the higher rate where weed infestations are or anticipated to be dense and/or applications are made early and longer residual control is desirable. To insure optimal herbicidal response, water

<sup>\*</sup>Not for use in California.

treated areas as soon as possible after application. A single rainfall or sprinkler irrigation of ½ inch or more is required to activate this product.

# Poa Annua (annual bluegrass) Control

Apply **OHP 1701B Granular** for preemergence control of *Poa annua* (annual bluegrass) at a rate of 150-200 lbs per acre (0.38 to 0.5 lbs active ingredient per acre). Use the higher rate where weed infestations are dense and/or applications are made early and longer residual control is desirable.

- \* Use on golf course turf is limited to fairways and roughs.
- \* Do not apply earlier than 16 weeks after over-seeding unless injury to ryegrass can be tolerated.

#### **Application Equipment and Instructions**

Apply this product with drop or rotary-type spreaders designed to apply granular herbicides. Calibrate application equipment prior to usage, and apply this product uniformly over the turfgrass area. A more uniform application can be made by spreading half of the required amount over the area and then applying the remaining half at a right angle to the previous direction of application. Avoid the use of spreaders that apply granular materials in narrow rows or concentrated bands. Avoid streaking, skips, or overlaps during application. Check equipment frequently to ensure equipment is functioning properly and applying uniform distribution of granules.

#### **Use Precautions for Turf**

- For best results, cultural practices that disturb the soil, such as core, spike, hydro-aerification, or verticutting, and topdressing should be done before application of this product. This product should not be applied until turfgrasses have recovered from stresses related to these or other mechanical operations. Irrigation or rainfall within 7 days after application will improve the performance of this product.
- Reseeding or Sprigging: Reseeding, overseeding, or sprigging of turfgrasses into areas that have been previously treated with this product should be delayed until 12 weeks from the time of application. If overseeding with perennial ryegrass, delay overseeding at least 8 weeks after application. When reseeding or overseeding, proper cultural practices such as soil cultivation, irrigation and fertilization should be followed. For best results, use mechanical or power seeding equipment (slit seeders) designed to give good seed-to-soil contact.
- Use of this product on turfgrass not well established, weakened by lack of moisture, chemical injury, insects, disease, or temperature extremes that cause stress will increase the potential for injury. Allow turfgrass weakened by these stresses to recover before application of this product.
- This product will not affect established annual bluegrass. If maintenance of annual bluegrass is desired, do not use this product during time of annual bluegrass germination. For AZ, CA, NV, OR, WA, NM, ID, MT and UT, this product may contribute to thinning or stand reduction in established stands of annual bluegrass.

When applied as directed under the conditions described, the following established turfgrasses are tolerant to this product:

# **Cool-Season Grasses**

bentgrass, creeping † Agrostis stolonifera
bluegrass, Kentucky Poa pratensis
fescue, fine †† Festuca rubra
fescue, tall Festuca arundinacea
ryegrass, perennial Lolium perenne

#### Warm-Season Grasses

**Bahiagrass** Paspalum notatum Bermudagrass Cynodon dactylon Buffalograss Buchloe dactyloides Carpetgrass Axonopus affinis centipedegrass Eremochloa ophiuroides Kikuyugrass Pennisetum clandestinum seashore paspalum Paspalum vaginatum St. Augustinegrass Stenotaphrum secundatum

Zoysiagrass

Zoysia japonica

#### Treatment of turfgrass species not listed on the label for OHP 1701B Granular

When applied as directed under the conditions described on this label, turfgrass listed above have shown tolerance in field trials. However, this product has not been tested on all cultivars of each species or under all possible growing conditions. Under your growing conditions, a limited number of plants should be treated for tolerance evaluations, prior to initiating large-scale applications. Follow directions given below to determine plant tolerance under your growing conditions prior to large scale use.

Users who wish to use OHP 1701B Granular on turfgrass species **not listed** on this label may determine the suitability for use by treating a small number of such plants at a directed rate. Prior to treatment of large areas, the treated plants should be observed for any signs of herbicidal injury for 30 to 60 days of normal growing conditions to determine if the treatment is safe to the target turfgrass species. To the extent consistent with applicable law, the user assumes responsibility for any plant damage or other liability resulting from use of OHP 1701B Granular on plant species not recommended on this label.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a clean, dry place. Store in original container and out of the reach of children, preferably in a locked storage area.

**PESTICIDE DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product must be disposed of on site or at approved waste disposal facility.

**CONTAINER HANDLING**: Non refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose in a sanitary landfill, or by incineration, or by other procedures allowed by State and local authorities.

#### TERMS AND CONDITION OF USE

If terms of the following Warranty Disclaimer, inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, inherent Risks of Use and Limitation of Remedies.

#### WARRANTY DISCLAIMER

OHP, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, OHP, Inc. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

This product has been researched to provide necessary data to support its use on the ornamentals listed on the label. However it is understood that tests may not have been carried out on all varieties or cultivars and under all growing conditions on all plants listed on the label. The user must always follow the label directions and exercise sound judgment and caution when using this product on a given variety until familiar with the results under prevailing growing conditions.

<sup>&</sup>lt;sup>†</sup> **Do not apply this product to Colonial bentgrass.** Use of this product on certain varieties of creeping bentgrass, such as 'Carmen', 'Cohansey', or 'Seaside' will result in undesirable turf injury. Not all varieties of creeping bentgrass have been tested.

<sup>&</sup>lt;sup>††</sup> The following fine fescue varieties have been found to be sensitive to this product: 'Atlanta', 'Banner', 'Beauty', 'Bilgart', 'CF-2', 'Enjoy', 'HF-93', 'Highlight', 'Ivalo', 'Jamestown', 'Koket', 'Majenta', 'Mary', 'Pennlawn', 'Tamara', 'Tatjana', 'Waldorf', and 'Waldina'

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO WARRANTY OR REPRESENTATION IS MADE, EXPRESS, OR IMPLIED, CONCERNING THE RESULTS OBTAINED FROM THE USE OF THIS PRODUCT IF NOT USED IN ACCORDANCE WITH DIRECTIONS OR ESTABLISHED SAFE PRACTICE. To the extent consistent with applicable law, the exclusive remedy of the user or Buyer, and the limit of liability of OHP, Inc. or any other Seller, for any and all losses, injuries or damages resulting from the use or handling of this product shall be the purchase price paid by the user or Buyer for the quantity of this product involved. The Buyer and all users are deemed to have accepted the terms of this Notice, which may be varied only by agreement in writing, signed by a duly authorized representative of OHP, Inc.

#### INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.) abnormal conditions (such as, but not limited to, excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of OHP, Inc. or the seller. All such risks shall be assumed by buyer.

#### LIMITATION OF REMEDIES

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, OHP, Inc.'s election, one of the following:

Refund of purchase price paid by buyer or user for product bought, or

Replacement of amount of product used.

To the extent consistent with applicable law, OHP, Inc. shall not be liable for losses or damages resulting from handling or use of this product unless OHP, Inc is promptly notified of such loss or damage in writing. To the extent consistent with applicable law, in no case shall OHP, Inc. be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of the Seller or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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[OHP 1701B Granular application for registration]