

 <p style="text-align: center;">U.S. ENVIRONMENTAL PROTECTION AGENCY</p> <p style="text-align: center;">Office of Pesticide Programs Registration Division (7505C) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460</p> <p>NOTICE OF PESTICIDE: <u> X </u> Registration <u> </u> Reregistration (under FIFRA, as amended)</p>	EPA Reg. Number: 34704-882	Date of Issuance: JUN 28 2005
	Terms of Issuance: Conditional	
	Name of Pesticide Product: Oryzalin T&O	
Name and Address of Registrant (include ZIP Code): Loveland Products, Inc. P.O. Box 1286 Greeley, Colorado 80632-1286		
<p>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.</p> <p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.</p> <p>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.</p> <p>This product is registered in accordance with FIFRA sec.3(c)(7)(A) provided that you.</p> <ol style="list-style-type: none"> 1. Make the following label changes: <ol style="list-style-type: none"> A. Under "Direction for Use" the sentence must read "Read all Directions for Use carefully before applying." <p>(Comments continued on the next page for this Notice of Registration)</p> <p>If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product under the enclosed stamped copy of the label constitutes acceptance of these conditions</p>		
Signature of Approving Official: <i>Joanne J. Miller</i>	Date: JUN 28 2005	

- B. Under the "Established Plant Species" Silver dollar, Conica-dwarf and Nana-dwarf must be moved under Common Name. Also, add Hopseed bush as a common name to Dodonaea viscosa.
 - C. Revise the EPA Registration Number to read, "EPA Reg. No. 34704-882.
2. Submit and/or cite all data required for the registration/reregistration of this product when the Agency requires all registrants of similar products to submit data.
 3. Submit one (1) copy of the final printed labeling before you release this product for shipment.

A stamped copy of the label is enclosed for your records.

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)



ORYZALIN T&O

3/9
ACCEPTED
with **COMMENTS**
EPA Letter Dated:
JUN 28 2005
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

34704-882

A selective preemergence surface-applied herbicide for control of annual grasses and many broadleaf weeds in:

- Landscape Ornamentals
- Container Grown Ornamentals
- Field Grown Ornamentals
- Drainage Areas Under Shadehouse Benches
- Ornamental Bulbs
- Ground Covers/Perennials
- Christmas Tree Plantations
- Non-Bearing Fruit and Nut Trees and Non-Bearing Vineyards
- Noncropland and Industrial Sites
- Established Warm Season Turf (including Bahiagrass, Bermudagrass, Buffalograss, Centipedegrass, St. Augustinegrass and Zoysiagrass)
- Tall Fescue (warm season areas)

ACTIVE INGREDIENT:	
Oryzalin: 3,5-dinitro-N,N'-dipropylsulfanilamide	40.4%
INERT INGREDIENTS	59.6%
TOTAL	100.0%

Contains 4.0 pounds of active ingredient per gallon.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

KEEP OUT OF REACH OF CHILDREN CAUTION—PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

EPA REG. NO. 34704-
EPA EST. NO. 37429-GA-01
NET CONTENTS 150 GALS. (561 L)

IHT

04/05

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes Eye Irritation • Prolonged or Frequently Repeated Contact May Cause Allergic Reaction in Some Individuals

Avoid contact with eyes or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves and shoes plus socks.
Mixers and loaders must wear a chemical resistant apron in addition to other PPE.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse 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 Statements

When handlers use closed systems or enclosed cabs 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.

FIRST AID

If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
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Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL:
1-800-301-7976.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not apply directly to water, 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. Cover or incorporate spills.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use before applying.

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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.
Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. Workers may enter the treated areas without required PPE during the reentry interval following 1/2 to 1 inch of rainfall or irrigation, if they are performing tasks that do not involve contact with the soil subsurface; otherwise, 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 and 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, forests or greenhouses.
Entry Restrictions for Non-WPS Uses: Keep all persons, children and pets out of treated area until sprays have dried.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.
STORAGE: Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.
PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

Oryzalin T&O herbicide is a preemergence surface-applied product for the control of many annual grasses and broadleaf weeds in ornamental plantings, bulbs, ground covers/perennials, established warm-season turfgrass, Christmas tree plantations, non-bearing trees and vines, and noncropland and industrial sites.

Use as directed. Do not apply this product to any type of irrigation system.

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

Precaution: Avoid spray drift to non-target areas when applying Oryzalin T&O. Spray drift may result in reduced emergence of non-target plants adjacent to the treated area. Poor weed control may result if directions are not followed. Over-application may result in crop injury or excessive soil residue.

APPLICATION

Soil Preparation

Oryzalin T&O controls weeds growing from seed. Oryzalin T&O will not control emerged weeds. Oryzalin T&O does not control established weeds, weeds growing from stolens, rhizomes or root pieces. Therefore areas to be treated should be free of emerged weeds. Weed residues, prunings, and trash should be thoroughly mixed into the soil or removed prior to treatment. In field applications, the soil should be in good tilth and free of clods at the time of application.

Ground Application: Apply Oryzalin T&O as a directed spray to the soil surface or over the top of plants. Use only a properly calibrated, low-pressure, herbicide sprayer that will apply the spray uniformly. Use screens no finer than 50 mesh in nozzles and in-line strainers. Apply the appropriate rate of Oryzalin T&O, as outlined in "Approved Uses" section of this label. In all cases, use sufficient water volume to obtain uniform coverage and deliver the desired rate of Oryzalin T&O to the treated area. The volume of water used is not critical, as long as the desired rate of Oryzalin T&O is delivered uniformly across the area treated. When calibrating, determine the volume of water delivered to a given area (1,000 sq ft, 1 acre, etc.). Then mix the desired rate of Oryzalin T&O in the amount of water required to cover the entire area to be treated. As the amount of water used (spray volume) decreases, the importance of accurate calibration and uniform application increases. Check the sprayer daily to ensure proper calibration and uniform application. Maintain continuous agitation from mixing through application. Avoid spray pattern skips and overlaps that may result in incomplete coverage or over-application.

Hand Held or Backpack Sprayer Application: The amount of water used to apply Oryzalin T&O herbicide is not critical, but should be sufficient for uniform coverage of the target area. Calibrate by determining the volume of water required to treat 1,000 square feet. Use calibration volume to determine the amount of water and Oryzalin T&O herbicide needed to treat the target area (see the following calibration example). Note: Sprayer calibration (volume of spray needed to treat 1,000 square feet) will vary with each individual operator.

Steps in Calibration:

1. Mark an area of 1,000 square feet (i.e. 20 by 50 feet, or 25 by 40 feet).
2. Place the sprayer on a level surface and add water noting the final level of water in the spray tank.
3. Spray the marked area with a sufficient volume of water to provide uniform coverage. Refill the sprayer to the same level as before measuring the amount of water added. The measured water added to the sprayer is the volume needed to cover 1,000 square feet.
4. Determine the application rate (fl oz/1,000 sq ft) for Oryzalin T&O from the "Approved Uses" section of this label.
5. To each volume of water used, as measured in step 3, add the amount of Oryzalin T & O as determined in step 4.

Example: If the sprayer used 2 gallons of water to cover 1,000 square feet and the desired application rate of Oryzalin T&O is 3 fluid oz/1,000 square feet, then you would add 3 fluid ounces of Oryzalin T&O to every 2 gallons of water to be used.

MIXING DIRECTIONS

Shake Well Before Using

Precaution: Do not allow the spray mixture to siphon back into the water source.

Oryzalin T&O - Alone

Make sure the spray tank is clean and use only clean water. Fill the spray tank 1/2 - 3/4 full. Start agitation and add the required amount of Oryzalin T&O. Continue agitation and finish filling the spray tank. Maintain continuous agitation until application is completed.

Oryzalin T&O - Tank Mix Combinations

Prior to mixing, read and carefully follow all label instructions and precautions for each

weeds powder product may be impacted by pre-mixing with water (stomping). Adding the slurred materials to the spray tank through a wetting screen of 20 or 35 mesh will help assure good initial dispersion.

Equipment Cleaning

If a buildup of material occurs on the walls of the spray tank, it should be removed between fillings by washing with soap and water and rinsing thoroughly. Tanks, lines, screens, and nozzles should be cleaned thoroughly after each use.

Activation and Cultivation

Oryzalin T&O will remain stable on the soil surface up to 21 days following application. In the absence of timely rainfall, irrigation can be used to activate Oryzalin T&O. A minimum of one-half (1/2) inch of rain or its equivalent in sprinkler irrigation is necessary to activate Oryzalin T&O. If weeds begin to emerge due to lack of rainfall or irrigation, shallow cultivate 1-2 inches deep to destroy existing weeds, or remove them by hand. Shallow cultivation to a depth of 1-2 inches will enhance herbicidal effectiveness. Erratic weed control may result if Oryzalin T&O is not activated by rainfall, irrigation, or cultivation within 21 days of application, or existing weeds have not been removed.

WEEDS CONTROLLED BY ORYZALIN T&O

Annual Grasses:

Common Name
barley, little
barnyardgrass (watergrass)
bluegrass, annual
crabgrass, large
crabgrass, smooth
crowfootgrass
cupgrass, southwestern
foxtail, bristleglass
foxtail, giant
foxtail, green (pigeongrass)
foxtail, robust
foxtail, yellow
goosegrass (silver crabgrass)
Johnsongrass (seedling only)
juncelone
lovegrass, Mexican
lovegrass, orcutt
oat, wild
panicum, browntop
panicum, fall (spreading
panicgrass)
panicum, Texas (buffalograss)
(Coloradograss)
ryegrass, Italian
signalgrass (Brachiaria)
sprangletop, red
witchgrass

Scientific Name

Hordeum pusillum
Echinochloa crus-galli
Poa annua
Digitaria sanguinalis
Digitaria ischaemum
Dactyloctenium aegyptium
Eriochloa gracilis
Setaria magna
Setaria faberi
Setaria viridis
Setaria robusta
Setaria glauca
Eleusine indica
Sorghum halepense
Echinochloa colonum
Eragrostis mexicana
Eragrostis orcuttiana
Avena fatua
Panicum fasciculatum

Panicum dichotomiflorum

Panicum texanum
Cenchrus incertus
Brachiaria spp.
Leptochloa filiformis
Panicum capillare

Broadleaf Weeds:

Common Name
bittercress
carpetweed
chickweed, common
fiddleneck, coast
filaree, redstem
filaree, whitestem
groundsel, common
henbit
knotweed, prostrate
lambquarters
pigweed, prostrate
pigweed, redroot
pigweed, spring
pigweed, tumble
puncturevine
purslane, common
pusley, Florida (Florida Purslane)
(Mexican clover)
(pusley)
rocket, London

Scientific Name

Cardamine oligosperma
Mollugo verticillata
Stellaria media
Amsinckia intermedia
Erodium cicutarium
Erodium moschatum
Senecio vulgaris
Lamium amplexicaule
Polygonum aviculare
Chenopodium album
Amaranthus blitoides
Amaranthus retrofractus
Amaranthus hybridus
Amaranthus albus
Tribulus terrestris
Portulaca oleracea

Richardia scabra
Sisymbrium irio

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Special Use Precautions

Apply only to established plants that have been transplanted into their growing location for a sufficient period of time to allow the soil to be firmly settled around the roots from packing and rainfall or irrigation.

Rooted liners should be removed from their original growing containers and placed in new containers at least two weeks prior to treatment or injury may occur.

To avoid possible injury, do not apply Oryzalin T&O to:

- Nursery, forest, or Christmas tree: seedling beds, cutting beds, or transplant beds.
- Unrooted liners or cuttings that have been planted in pots for the first time.
- Pots less than 4 inches wide.
- Ground covers until they are established and well rooted.
- Ornamental plantings where there is likelihood of runoff onto lawn areas.
- Areas containing dichondra or cool season turfgrass species.

<i>Ulmus</i> spp.	money locust	F
<i>Heteromeles arbustiflora</i>	Toyon	F
<i>Juniperus virginiana</i>	Redcedar, Eastern	F
<i>Koeleria paniculata</i>	Goldenrain tree	F
<i>Liquidambar styraciflua</i>	Sweetgum, American	C,F
<i>Magnolia</i> spp.	Magnolia	F
<i>Melus</i> spp.	Crabapple	F
<i>Morus alba</i>	White mulberry	F
<i>Picea abies</i>	Pendula-weeping Norway spruce	F
	Repens-spreading Norway spruce	F
	Spruce, Norway	F
<i>Picea engelmannii</i>	Spruce, Englemann	F
<i>Picea glauca</i>	Spruce, white	F
<i>Conica-dwarf</i>	Alberta spruce	F
<i>Picea glauca conica</i>	Dwarf Alberta spruce	F
<i>Picea mariana</i>	Spruce, black	F

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Broadleaf Weeds cont'd.:

Common Name rockpurslane, desert shepherdspurge spurge, prostrate woodsorrel, yellow	Scientific Name <i>Calandrinia ciliata</i> <i>Capsella bursa-pastoris</i> <i>Euphorbia humistrata</i> <i>Oxalis stricta</i>
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WEEDS SUPPRESSED BY ORYZALIN T&O

Control of the following weeds may be erratic, ranging from poor to excellent, depending upon soil temperature, time of germination, depth of seed in the soil, and amount and timing of soil moisture:

Common Name horseweed ladythumb lettuce, prickly mallow, common milkweed, climbing morning glory mustard, black mustard, wild nightshade, black ragweed, common smartweed sowthistle, annual spurge, spotted teaweed (prickly sida) velvetleaf wheat, volunteer	Scientific Name <i>Coryza canadensis</i> <i>Polygonum persicaria</i> <i>Lactuca seriola</i> <i>Malva neglecta</i> <i>Sarcostemma cynanchoides</i> <i>Ipomoea</i> spp. <i>Brassica nigra</i> <i>Brassica kaber</i> <i>Solanum nigrum</i> <i>Ambrosia artemisiifolia</i> <i>Polygonum pensylvanicum</i> <i>Sonchus oleraceus</i> <i>Euphorbia maculata</i> <i>Sida spinosa</i> <i>Abutilon theophrasti</i> <i>Triticum</i> spp.
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APPROVED USES ORNAMENTAL PLANTINGS

Oryzalin T&O is recommended for use on certain landscape container-and field-grown established ornamental plants including: trees, shrubs, ground covers/perennials, flowers, non-bearing fruit and nut trees, non-bearing vineyards; and in the production of ornamental bulbs (See "Ornamental Bulbs" section for special use directions).

Broadcast Application Rates

Labeled Use Site	Length of Control	Oryzalin T&O		Minimum Time Between Applications (months)	Total Amount Allowed Per Year (g@acre)
		(g@acre)	(fl oz/1000 sq ft)		
Landscape Ornamentals	2-4 months	2	1.5	2	8
	3-6 months	3	2.2	4	12
	4-8 months	4	3	4	12
Field-Grown and Container-Grown Ornamentals	2-4 months	2	1.5	3	8
	3-6 months	3	2.2	3	9
	4-8 months	4	3	3	12

Tank Mix Combinations

Tank mix combinations of Oryzalin T&O plus Roundup, and many other labeled herbicides may be used to control undesirable vegetation in ornamental areas. Oryzalin T&O may also be tank mixed with Gallery herbicide and applied preemergence to broaden the spectrum of broadleaf weed control in ornamental areas. Applied as directed, these tank mixes of Oryzalin T&O will provide control of susceptible weed species listed on the respective labels. Refer to tank mix product labels for specific use directions, precautions, and limitations before use.

Oryzalin T&O Plus Roundup: Tank mix combinations of Oryzalin T&O plus Roundup are recommended to control existing undesirable vegetation. Applied as directed, Oryzalin T&O plus Roundup will provide postemergence control of susceptible weed species listed on the label for Roundup and residual preemergence control of susceptible weed species listed on the label for Oryzalin T&O. Refer to the label for Roundup for specific use directions, precautions, and limitations before use.

Precautions: Do not apply sprays containing Roundup over the top of ornamental plants. Extreme care must be exercised to prevent sprays containing Roundup from coming in contact with foliage and stems of turfgrasses, trees, shrubs, or other desirable vegetation since severe damage or death may result. If spraying with Roundup in areas adjacent to desirable plants, use a shield to prevent spray from contacting foliage and stems of desirable plants.

Special Use Precautions

Apply only to established plants that have been transplanted into their growing location for a sufficient period of time to allow the soil to be firmly settled around the roots from packing and rainfall or irrigation.

Rooted liners should be removed from their original growing containers and placed in new containers at least two weeks prior to treatment or injury may occur.

To avoid possible injury, do not apply Oryzalin T&O to:

- Nursery, forest, or Christmas tree: seedling beds, cutting beds, or transplant beds.
- Unrooted liners or cuttings that have been planted in pots for the first time.
- Pots less than 4 inches wide.
- Ground covers until they are established and well rooted.
- Ornamental plantings where there is likelihood of runoff onto lawn areas.
- Areas containing dichondra or cool season turfgrass species.

On container grown ornamentals where weed seed germination continues for extended periods of time, do not make repeat applications of Oryzalin T&O for at least 90 days or crop injury may occur.

Applications of Oryzalin T&O over the top of plants with newly forming buds may cause injury. In this situation a directed spray is recommended.

For soils treated with Oryzalin T&O during the previous season, plant only the ornamental species listed on this label or injury may occur.

Ice Plant: When establishing unrooted ice plant on coarse-textured soils in landscape plantings, do not exceed the 2 quart per acre rate of Oryzalin T&O or crop injury may occur.

Note: Injury on the following plant species has been observed following applications of Oryzalin T&O and use is not recommended:

- Deutzia gracilis* (slender deutzia)
- Psuedotsuga menziesii* (Douglas-fir)
- Thuja occidentalis* Techny (Techny arborvitae)
- Tsuga Canadensis* (eastern hemlock)
- Begonia* spp. (begonia)
- Coleus hybridus* (coleus)

Oryzalin T&O May Be Used on the Following Established Plant Species:
(Note: Limitations on recommended treatment methods).

Trees	Recommended Treatment Method	Scientific Name	Common Name	
				F=Field Grown C=Container Grown
		<i>Abies balsamea</i>	Fir, balsam	F
		<i>Abies concolor</i>	Fir, white	F
		<i>Abies fraseri</i>	Fir, fraser	F
		<i>Abies grandis</i>	Fir, grand	F
		<i>Abies veitchii</i>	Fir, Veitch	F
		<i>Abies lasiocarpa</i>	Fir, alpine	F
		<i>Abutilon hybridum</i>	Albus-flowering maple	F
			Luteus-flowering maple	F
			Roseus-flowering maple	F
			Tangerine-flowering maple	F
			Vesuvius red-flowering maple	F
			Flame maple	F
		<i>Acer ginnala</i>	Red sunset maple	F
		<i>Acer rubrum</i>	Silver maple	F
		<i>Acer saccharum</i>	Maple	F
		<i>Acer</i> spp.		F
		<i>Asplenium australis</i>	Australian tree fern	C, F
		<i>Arecastrum romanoffianum</i>	Queen palm	F
		<i>Betula nigra</i>	Birch, river	F
		<i>Betula papyrifera</i>	Paper birch	F
		<i>Betula pendula</i>	Birch, white	F
		<i>Buddleia buxifera</i>	Black olive	F
		<i>Carya</i> spp.	Pecan, ornamental	C, F
		<i>Cedrus atlantica</i>	Atlas cedar	C, F
		<i>Cedrus deodara</i>	Deodar cedar	C, F
		<i>Cercidium siliqua</i>	Carob	F
		<i>Cercidium floridum</i>	Palo Verde, blue	F
		<i>Cercis canadensis</i>	Redbud	C, F
		<i>Chamaecyparis lawsoniana</i>	Falsecypress, Lawson	F
		<i>Chamaecyparis obtuse</i>	Filicoides-fem spray cypress	F
			Gracilis-slender Hinoki cypress	F
			Sawara-false cypress	F
		<i>Chamaecyparis pisifera</i>	Squarrosa-moss cypress	F
			Cat Palm	F
		<i>Chamaedorea cataractarum</i>	Palm	F
		<i>Chamaedorea costaricana</i>	Parlor palm	F
		<i>Chamaedorea elegans</i>	Citrus, ornamental	C, F
		<i>Citrus</i> spp.	Dogwood, flowering	F
		<i>Cornus florida</i>	Cryptomena, Japanese	C, F
		<i>Cryptomena japonica</i>	Carrot wood	F
		<i>Cupaniopsis anacardioides</i>	Cypress, Arizona	C, F
		<i>Cupressus arizonica (glabra)</i>	Arizona cypress	C, F
		<i>Cupressus glabra</i>	Leyland cypress	C, F
		<i>Cupressocyparis leylandii</i>	Cypress, Italian	C, F
		<i>Cupressus sempervirens</i>	Tasmanian tree fern	C, F
		<i>Dicksonia antarctica</i>	Russian Olive	C, F
		<i>Elaeagnus angustifolia</i>	Red gum eucalyptus	F
		<i>Eucalyptus camaldulensis</i>	Eucalyptus, mealy	F
		<i>Eucalyptus cinerea</i>	Eucalyptus	F
		<i>Silver dollar</i>	Eucalyptus, narrow-leaved	F
		<i>Eucalyptus nicholii</i>	Eucalyptus, red ironbark	F
		<i>Eucalyptus sideroxylon</i>	Ficus	F
		<i>Ficus benjamina</i>	Ash	F
		<i>Fraxinus</i> spp.	Ginkgo (Maidenhair tree)	C, F
		<i>Ginkgo biloba</i>	Honey locust	F
		<i>Gleditsia inacanthos</i>	Toyon	F
		<i>Heteromeles arbutiflora</i>	Redcedar, Eastern	F
		<i>Juniperus virginiana</i>	Goldenrain tree	F
		<i>Koelerutena paniculata</i>	Sweetgum, American	C, F
		<i>Liquidambar styraciflua</i>	Magnolia	F
		<i>Magnolia</i> spp.	Crabapple	F
		<i>Malus</i> spp.	White mulberry	F
		<i>Morus alba</i>	Pendula-weeping Norway spruce	F
		<i>Picea abies</i>	Repens-spreading Norway spruce	F
			Spruce, Norway	F
		<i>Picea engelmannii</i>	Spruce, Englemann	F
		<i>Picea glauca</i>	Spruce, white	F
		<i>Conica-dwarf</i>	Alberta spruce	F
		<i>Picea glauca conica</i>	Dwarf Alberta spruce	F
		<i>Picea mariana</i>	Spruce, black	F

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Trees cont'd:		Recommended Treatment	
Method		F=Field Grown	C=Container Grown
Scientific Name	Common Name		
<i>Pinus pungens</i>	Glauca-Colorado blue spruce	F	
	Hoopii-Hoop's blue spruce	F	
	Koster-Koster blue spruce	F	
	Spruce, Colorado	C,F	
<i>Pinus aristata</i>	Bristlecone pine	F	
<i>Pinus carolinensis</i>	Canary Island pine	F	
<i>Pinus contorta</i>	Shore pine, beach pine	F	
<i>Pinus edulis</i>	Edinca pine	F	
<i>Pinus halepensis</i>	Aleppo pine	C, F	
<i>Pinus radiata</i>	Monterey pine	F	
<i>Pinus spp.</i>	Pine	C,F	
<i>Pinus strobus</i>	Eastern white pine	F	
<i>Pinus sylvestris</i>	Scotch pine	F	
<i>Pinus thunbergiana</i>	Japanese black pine	F	
<i>Platanus occidentalis</i>	American sycamore	F	
<i>Platanus racemosa</i>	California sycamore	F	
<i>Podocarpus spp.</i>	Podocarpus	F	
<i>Populus deltoides</i>	Cottonwood	F	
	Cottonwood (grown for pulp)	F	
<i>Prunus caroliniana</i>	Laurelcherry, Carolina	F	
<i>Prunus glandulosa</i>	Dwarf flowering almond	C,F	
<i>Prunus laurocerasus</i>	Laurelcherry, English	F	
<i>Prunus mahaleb</i>	Cherry, Mahaleb	F	
<i>Prunus yedoensis</i>	Yoshino flowering cherry	F	
<i>Pyrus communis</i>	Pear	F	
<i>Quercus palustris</i>	Pin oak	F	
<i>Quercus phellos</i>	Willow oak	F	
<i>Quercus rubra</i>	Red oak	C,F	
<i>Quercus spp.</i>	Oak	C, F	
<i>Salix babylonica</i>	Babylon weeping willow	F	
	Corkscrew willow	F	
<i>Schinus molle</i>	California pepper tree	F	
<i>Sequoia sempervirens</i>	Redwood, coast	F	
<i>Sequoiadendron giganteum</i>	Giant sequoia	F	
<i>Swietenia mahogani</i>	Mahogany	F	
<i>Tabebuia carabe</i>	Yellow tab	F	
<i>Tilia cordata</i>	Linden, little leaf	C,F	
<i>Ulmus parvifolia</i>	Chinese elm	F	
<i>Umbellularia californica</i>	California laurel	F	
<i>Washingtonia robusta</i>	Mexican fan palm	F	

Shrubs		Recommended Treatment Method	
		F=Field Grown	C=Container Grown
Scientific Name	Common Name		
<i>Abelia grandiflora</i>	Glossy abelia	F	
<i>Acacia dealbens</i>	Acacia, prostrate	F	
<i>Agave americana</i>	Century plant	F	
<i>Agave macrocarpis</i>	Agave	F	
<i>Anisodonta hypomandarinum</i>	Cape mallow	C,F	
<i>Arctostaphylos stanfordiana</i>	Manzanita, Stanford	F	
<i>Astibe chinensis</i>	Asiatic false spirea	C,F	
<i>Baccharis pilularis</i>	Coyotebush	F	
<i>Berberis thunbergii</i>	Aurea-golden Japanese barberry	C,F	
	Crimson pygmy barberry	C,F	
	Atropurea-redleaf Japanese barberry	C,F	
	Barberry, Japanese	C,F	
<i>Bougainvillea spp.</i>	Barbara Kerst	F	
	California gold	F	
	Scarlet O'Hara	F	
	Texas dawn	F	
	Littleleaf boxwood	F	
<i>Buxus microphylla</i>	Boxwood, Japanese	C,F	
<i>Buxus sempervirens</i>	Boxwood, common	C,F	
<i>Callistemon citrinus</i>	Bottlebrush, lemon	C,F	
<i>Cassia artemisioides</i>	Cassia, feathery	F	
<i>Ceanothus americanus</i>	Jerseytea, redroot	C,F	
<i>Ceanothus spp.</i>	Wild lilac	C,F	
<i>Chaenomeles japonica</i>	Flowering quince	C,F	
<i>Chamaecyparis obtusa</i>	Kosten cypress	F	
	Hinoki cypress	F	
	Toruosa cypress	F	
<i>Chamaecyparis pisifera</i>	Squarrosa Minima cypress F	F	
<i>Chamaecyparis pisifera spp.</i>	Filifera-thread cypress	F	
<i>Chrysalidocarpus lutescens</i>	Areca palm	F	
<i>Cleyera japonica</i>	Cleyera, Japanese	C,F	
<i>Colsonema pulchrum</i>	Pink breath of heaven	C,F	
<i>Cornus alba</i>	Sibirica-Siberian dogwood	F	
<i>Cornus kousa</i>	Dogwood, kousa	C,F	
<i>Cornus stolonifera</i>	Flawrnea-yellowtwig dogwood	F	
<i>Cotoneaster adpressus</i>	Praecox-early cotoneaster	F	
<i>Cotoneaster apiculatus</i>	Cotoneaster, cranberry	C,F	
<i>Cotoneaster buxifolius</i>	Cotoneaster, brightbead	F	
<i>Cotoneaster congestus</i>	Cotoneaster, Pyrenees	F	
<i>Cotoneaster dammeri</i>	Cotoneaster, bearberry	C,F	
<i>Cotoneaster himalayian</i>	Himalayan cotoneaster	F	
<i>Cotoneaster horizontalis</i>	Cotoneaster, rock	C,F	
<i>Cotoneaster lacteus</i>	Cotoneaster, parney	C,F	
<i>Cotoneaster microphyllus</i>	Cotoneaster, rockspray	F	
<i>Cotoneaster saikicilia</i>	Willowleaf cotoneaster	C,F	
<i>Cytisus praecox</i>	Hollandia-warmster broom	F	
<i>Cytisus scoparius</i>	Lena-Scotch broom	F	
<i>Dasylium wheeleri</i>	Sotol, desert spoon	F	
<i>Deutzia crenata</i>	Naikeana-dwarf deutzia	F	
<i>Dodonaea viscosa</i>	Hopseedbush, dammy	F	

Shrubs cont'd:		Recommended Treatment Method	
		F=Field Grown	C=Container Grown
Scientific Name	Common Name		
<i>Escalonia exoniensis</i>	Escalonia	C,F	
<i>Euonymus alata</i>	Euonymus, winged	F	
<i>Euonymus fortunei</i>	Canada gold euonymus	C,F	
	Emerald gold euonymus	C,F	
	Euonymus, stringy bark	C,F	
	Wintercreeper	C,F	
	Euonymus, evergreen	C,F	
	Silver king euonymus	F	
<i>Euonymus japonica</i>	Euonymus, spreading	F	
	Euonymus, spreading	F	
	Bigleaf wintercreeper	C,F	
	Fatsyhedera	C,F	
	Japanese aralia	C,F	
	Blue margueme	C,F	
	Forsythia, border	F	
	Gardenia	C,F	
	Woodwaxen	F	
	Rose, Estey-hibiscus	F	
	Hibiscus, Chinese	F	
	Rose of Sharon, Red Bird	F	
	Rose of Sharon, Red Heart	F	
	Rose of Sharon, Woodbridge	F	
	Rose-of-Sharon (Shrubalthea)	F	
	Balkans holly	F	
	Gold coast holly	F	
	Holly, English	F	
	San Jose holly	C,F	
	Dwarf Burford holly	C,F	
	Holly, Chinese	C,F	
	Compacta-dwarf Japanese holly	C,F	
	Convexa holly	C,F	
	Hellen-Heller's Japanese holly	C,F	
	Holly, Japanese	C,F	
	Nordica-hiberry holly	F	
	Blue boy holly	F	
	Blue girl holly	F	
	Ebony magic holly	F	
	Nana-dwarf yaupon holly	C,F	
	Pendula-weeping yaupon holly	C,F	
	yaupon holly	C,F	
	Meda-old gold juniper	C,F	
	Emerald sea shore juniper	F	
	Huntington blue juniper	C,F	
	Wiltoni-blue carpet juniper	C,F	
	Nana-dwarf Japanese garden juniper	C,F	
	Prostrata juniper	C,F	
	Broadmoor juniper	F	
	Foemina-Hicks juniper	F	
	Tamansotolia-Tam juniper	F	
	Emerald green juniper	F	
	Juniper	C,F	
	Blue juniper	F	
	Blue star juniper	F	
	Parson's juniper	F	
	Shrimp plant	C,F	
	Honeysuckle, Mexican	F	
	Laurel, mountain	F	
	Crape myrtle	C,F	
	English lavender	C,F	
	Leucothoe, coast	F	
	Leucothoe, drooping	F	
	Privet, amur	C,F	
	Privet, Japanese	C,F	
	yellow tp ligustrum	C,F	
	Privet, glossy	C,F	
	California privet	F	
	Howard's privet	F	
	Wax leaf privet	F	
	Privet, golden	C,F	
	Vicary golden privet	C,F	
	Chinese fountain palm	F	
	Winter honeysuckle	F	
	Flowering woodbine	F	
	Serotina woodbine	F	
	Trumpet honeysuckle	F	
	(No common name)	C,F	
	Oregon grape	F	
	Myoporum, prostrate	F	
	Myrtle, true C,F	F	
	Compacta-dwarf heavenly bamboo	C,F	
	Harbour dwarf-heavenly bamboo	C,F	
	Heavenly bamboo (Nandina)	C,F	
	Nana compacta-heavenly bamboo	C,F	
	Nana purpurea-heavenly bamboo	C,F	
	Woods dwarf-heavenly bamboo	C,F	
	Hardy red oleander	C,F	
	Oleander	C,F	
	Ruby lace	C,F	
	Osmanthus, holly-leaf	F	
	Japanese spurge	C,F	
	Mockorange	C,F	
	Pygmy date palm	F	
	Fraser's photinia	C,F	
	Photinia	C,F	
	Lily-of-the-valley	F	
	Snowdnt lily-of-the-valley	F	
	Temple bells lily-of-the-valley	F	
	Valley rose lily-of-the-valley	F	
	Andromeda	C,F	
	Pittosporum	C,F	

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Shrubs cont'd:		Recommended Treatment Method
Scientific Name	Common Name	F=Field Grown C=Container Grown
<i>Pittosporum tobira</i>	Green pittosporum	F
	Japanese pittosporum	F
	Tobira	F
	Wheeler's dwarf pittosporum	F
<i>Platycladus orientalis</i>	Arborvitae, Oriental	C,F
<i>Plumbago arcuata</i>	Blue cape plumbago	F
<i>Podocarpus macrophyllus</i>	Yewpine	C,F
<i>Potentilla fragiformis</i>	Cinquefoil	F
<i>Potentilla fruticosa</i>	Cinquefoil	C,F
<i>Protea neriifolia</i>	Protea	F
<i>Pyracantha coccinea</i>	Firethorn, scarlet	C,F
<i>Pyracantha fortuneana</i>	Lolendei/Monrovia pyracantha	C,F
<i>Pyracantha fortuneana</i>	Monon pyracantha	C,F
	Red elf hybrid pyracantha	C,F
	Rutgers hybrid pyracantha	C,F
	Santa Cruz pyracantha	C,F
	Victory pyracantha	C,F
<i>Pyracantha skoldzumi</i>	Firethorn, Formosa	C,F
<i>Pyracantha fortuneana</i>	Firethorn	C,F
<i>Rhaphiolepis indica</i>	Enchantress-Moness rhaphiolepis	F
	Rhaphiolepis (India hawthorn)	C,F
	Springtime-Monme rhaphiolepis	F
<i>Raphiolepis ovata</i>	Roundleaf rhaphiolepis	F
<i>Rhipsalidopsis gaertneri</i>	Eastercactus	C,F
<i>Rhododendron calendulaceum</i>	Flame azalea	F
<i>Rhododendron campylocarpum</i>	Butterfly rhododendron	F
<i>Rhododendron carolinianum x dauricum</i>	PJM rhododendron	F
<i>Rhododendron catawbiense</i>	Catawba album rhododendron	C,F
	Catawba rhododendron	C,F
	Lord Roberts rhododendron	C,F
	Rocket rhododendron	C,F
<i>Rhododendron forestii x griersonianum</i>	Elizabeth rhododendron	F
<i>Rhododendron hybrid spp.</i>	America rhododendron	F
	English Roseum rhododendron	F
	Nova Zambia rhododendron	F
	Scimitation rhododendron	F
<i>Rhododendron impeditum</i>	Rhododendron	F
<i>Rhododendrum indica</i>	Formosa azalea	C,F
	Waucubusa azalea	C,F
<i>Rhododendron kerume</i>	Coral bells azalea	C,F
	Hino crimson azalea	C,F
	Hino pink azalea	C,F
	Snow azalea	C,F
<i>Rhododendron maximum</i>	Rhodie max (rosebay)	C,F
<i>Rhododendron mucronulatum</i>	Rhododendron	F
<i>Rhododendron satsumi</i>	Gumpo pink azalea	F
	Higasa azalea	F
<i>Rhododendron spp.</i>	Azalea	C,F
	Rhododendron	C,F
<i>Rhododendron spp. hybrids</i>	Carroll azalea	C,F
	Girard Roberta azalea	F
	Golden Flare exbury azalea	F
<i>Rhus lancea</i>	Sumac, African	C,F
<i>Rosa rugosa</i>	Ramones rose	F
<i>Rosmarinus officinalis</i>	Rosemary	F
<i>Senecio cineraria</i>	Dusty miller	C,F
<i>Spiraea vanhouttei</i>	Bridal wreath	F
<i>Syringa vulgaris</i>	Lilac, common	C,F
<i>Syzygium paniculata</i>	Brush cherry	C,F
<i>Taxus cuspidata</i>	Yew, Japanese	F
<i>Taxus media</i>	Yew	F
<i>Thuja occidentalis</i>	Arborvitae, American	C,F
	Emerald arborvitae	F
	Globose-globe arborvitae	F
	Little giant-dwarf arborvitae	F
	Nigra-dark American arborvitae	F
	Pyramidalis arborvitae	F
	Rheingold arborvitae	F
	Woodwardii arborvitae	F
<i>Thuja orientalis</i>	Aurea nana-dwarf golden arborvitae	F
	Minima glauca-dwarf arborvitae	F
<i>Thuja plicata</i>	Red Cedar, Western	F
<i>Trachelospermum jasminoides</i>	Star jasmine, Chinese	F
<i>Verticillium merillii</i>	Christmas palm	F
<i>Viburnum carlesii</i>	Koreanspice viburnum	C,F
<i>Viburnum davidii</i>	David viburnum	F
<i>Viburnum japonicum</i>	Viburnum	F
<i>Viburnum judd (VX Judd)</i>	Viburnum	C,F
<i>Viburnum opulus sterile</i>	Common snowball viburnum	F
<i>Viburnum plicatum tomentosum</i>	Doublefile viburnum	F
<i>Viburnum setigerum</i>	Tea viburnum	F
<i>Viburnum suspensum</i>	Viburnum, Sandankwa	F
<i>Viburnum tinus</i>	Viburnum, Laurustinus	C,F
	Compactum-spring bouquet viburnum	F
<i>Viburnum tinus compactum</i>	Spring bouquet viburnum	F
<i>Viburnum trilobum compactum</i>	Dwarf cranberry bush	F
<i>Viburnum x pragense</i>	Viburnum	F
<i>Weigela florida</i>	Bristol ruby weigela	F
	Java red weigela	F
	Minuet weigela	F
	Weigela, old-fashioned	F
<i>Xylocma congestum</i>	Xylocma	C,F
<i>Yucca elata</i>	Yucca, soaptree	F
<i>Yucca recurvifolia</i>	Yucca, pendulous	F

Groundcovers/Perennials		Recommended Treatment Method
Scientific Name	Common Name	F=Field Grown C=Container Grown
<i>Agapanthus africanus</i>	Lily-of-the-Nile	C,F
<i>Ajuga spp.</i>	Carpet bugle	F
<i>Arciotheca calendula</i>	Cape weed	F
<i>Asparagus retrofractus</i>	(No common name)	C,F
<i>Asparagus variegata</i>	Tree fern	C,F
<i>Aster nove-angliae</i>	New England aster	C,F
<i>Aster novi-belgii</i>	New York aster	C,F
<i>Athyrium nipponicum</i>	Japanese painter fern	C,F
<i>Brassica oleracea</i>	Wild cabbage	C,F
<i>Callistephus chinensis</i>	China aster	C,F
<i>Campanula elatines</i>	Beltflower	C,F
<i>Carpobrotus edulis</i>	Ice plant, largeleaf (see label)	F
<i>Clytostoma callistegioides</i>	Trumpet vine, violet	C,F
<i>Cortaderia setacea</i>	Pampas grass	F
<i>Cuphea hyssopifolia</i>	False Mexican heather	C,F
<i>Delosperma alba</i>	White iceplant	F
<i>Dietsa vegeta</i>	Fortnight lily	C,F
<i>Digitalis mentenensis</i>	Foxglove	C,F
<i>Doronicum cordatum</i>	Leopard's bane	C,F
<i>Drosanthemum floribundum</i>	Trailing rosea iceplant	F
<i>Erianthus ravennae</i>	Hardy pampus grass	C,F
<i>Festuca ovina glauca</i>	Blue fescue	F
<i>Gaillardia grandiflora</i>	Blanket flower	C,F
<i>Gazania rigens leucolaena</i>	Gazania, trailing	C,F
<i>Gazania spp.</i>	Gazania	F
<i>Hedera canariensis</i>	Ivy, Algerian	F
<i>Hedera helix</i>	Ivy, English	F
<i>Heliotropium fragrans</i>	Common heliotrope	C,F
<i>Hemerocallis spp.</i>	Daylily	C,F
<i>Hosta lancifolia</i>	Albo-margarita hosta	C,F
<i>Hosta spp.</i>	Lily, plantain	C,F
<i>Heuchera micrantha</i>	Coral bells	C,F
<i>Hypericum spp.</i>	St. Johnswort	C,F
<i>Iberis sempervirens</i>	Evergreen candytuft	C,F
<i>Lampranthus spectabilis</i>	Trailing iceplant	F
<i>Laportospermum scapularum</i>	New Zealand teatree/Manuka	C,F
<i>Limonium perazi</i>	Statice/See lavender	C,F
<i>Liriope gigantea</i>	White lily turf	F
<i>Liriope muscari</i>	Lilac beauty lily turf	C,F
	Majestic lily turf	C,F
	Silvery sunproof lily turf	C,F
	Variegated liriope lily turf	C,F
	Big blue lily turf	C,F
	Edging lobelia	C,F
<i>Lobelia erinus</i>	Honeysuckle, Japanese	F
<i>Lonicera japonica</i>		F
<i>Mesembryanthemum crystallinum</i>	Ice plant (see label)	F
<i>Ophiopogon japonicus</i>	Mondo grass	F
<i>Osteospermum fruticosum</i>	Daisy, trailing African	F
<i>Pachysandra terminalis</i>	Japanese spurge	F
<i>Pennisetum setaceum</i>	Fourtaingrass	C,F
<i>Polystichum polylopharum</i>	Tassel fern	C,F
<i>Sedum brevifolium</i>	Stoncrop	C,F
<i>Sedum kamtschaticum</i>	Stoncrop	C,F
<i>Sedum spurium</i>	Stoncrop, tworow	C,F
<i>Tulbaghia violacea</i>	Society garlic	C,F
<i>Verbena rigida</i>	Veined verbena	C,F
<i>Veronica spp.</i>	Speedwell	C,F
<i>Vinca major</i>	Periwinkle, bigleaf	F
<i>Vinca minor</i>	Periwinkle, dwarf	F

Flowers		Recommended Treatment Method
Scientific Name	Common Name	F=Field Grown C=Container Grown
<i>Achillea spp.</i>	Yarrow	C,F
<i>Antirrhinum majus</i>	Snapdragon	F
<i>Caladium bicolor</i>	Caladium, fancy leafed	F
<i>Chrysanthemum spp.</i>	Chrysanthemum	C,F
<i>Claodium bicolor</i>	Fancy-leafed caladium	F
<i>Coreopsis lanceolata</i>	Coreopsis	F
<i>Coreopsis verticillata</i>	Threadleaf coreopsis	C,F
<i>Dianthus barbatus</i>	Sweet William	F
<i>Dianthus gratianopolitanus</i>	Cheddar pink	C,F
<i>Dicentra spectabilis</i>	Bleeding heart	C,F
<i>Dimorphotheca spp.</i>	Margold, cape	F
<i>Echinacea purpurea</i>	Coneflower, purple	C,F
<i>Evolutus nuttallianus</i>	Blue daze	C,F
<i>Geum quellyon</i>	Geum	F
<i>Glaadiolus hortulanus</i>	Glaadiolus	F
<i>Gypsophila paniculata</i>	Baby's breath	F
<i>Impatiens walleriana</i>	Impatiens (Busy lizzie)	F
<i>Iris spp.</i>	Iris, bearded	F
<i>Liatis spicata</i>	Blazing star	C,F
<i>Pelargonium hortorum</i>	Geranium	F
<i>Petunia spp.</i>	Petunia	C,F
<i>Portulaca grandiflora</i>	Moss, rose	F
<i>Ranunculus asiaticus</i>	Ranunculus, Persian	F
<i>Rosa spp.</i>	Rose	F
<i>Rudbeckia fulgida</i>	Black-eyed susan	C,F
<i>Rudbeckia hirta</i>	Daisy, gloriosa (black-eyed Susan)	F
<i>Salvia spp.</i>	Salvia (Sage)	F
<i>Stokesia laevis</i>	Aster, stokes	F
<i>Streptocarpus reginae</i>	Bird of paradise	F
<i>Tagetes spp.</i>	Margold	F
<i>Viola wittrockiana</i>	Pansy	F
<i>Zinnia elegans</i>	Zinnia, common	F

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Non-bearing Trees and Vines

Recommended Treatment Method
F=Field Grown
C=Container Grown

Almond	F
Apple	F
Apricot	F
Avocado	F
Blackberry	F
Blueberry	F
Boysenberry	F
Cherry, sour	F
Cherry, sweet	F
Currant	F
Dewberry	F
Elderberry	F
Fig	F
Filbert	F
Gooseberry	F
Grape, American	F
Grape, European	F
Grapefruit	F
Kiwi	F
Kumquat	C,F
Lemon	F
Loganberry	F
Macadamia nut	F
Nectarine	F
Olive	F
Orange	C,F
Peach	F
Pear	F
Pecan	C,F
Pistachio	F
Plum	F
Pomegranate	F
Prune	F
Raspberry	F
Walnut, black	F
Walnut, English	F

* Non-bearing plants are defined as those that will not bear fruit for at least one year after treatment.

ORNAMENTAL BULBS

Oryzalin T&O may be applied for control of susceptible annual weeds in ornamental bulbs, e.g., bulbous iris, daffodil (narcissus), hyacinth, and tulip. Apply Oryzalin T&O to the soil surface 2-4 weeks after planting, but prior to the emergence of annual weeds. For fall planted bulbs, apply Oryzalin T&O again in late winter or early spring to weed-free soil surfaces.

Broadcast Application Rates

Time of Application	Soil Texture	Oryzalin T&O		Minimum Time Between Applications (months)	Total Amount Allowed Per Year (qt/acre)
		(qt/acre)	(fl oz/1000 sq ft)		
Fall	Coarse	0.75	0.5	3	1.5
Fall	Medium and Fine	1.5	1.0	3	2.25
Feb.-March	All Soil Textures	0.75	0.5	3	2.25

Special Use Precautions:

Do not apply to tulip plants that have emerged to a height greater than 3/4 inch. Do not apply to gladiol corms prior to emergence or less than one (1) inch in diameter.

SHADEHOUSE AREAS

Oryzalin T&O may be applied to drainage areas under benches in open shadehouse-type structures where the natural flow of air is unimpeded. Do not apply within 3 weeks to enclosure of greenhouse or poly-type structures.

CHRISTMAS TREE PLANTATIONS

Oryzalin T&O Alone

Apply Oryzalin T&O as a directed spray to the soil surface or as an overtop spray to established plantings of field grown Christmas tree species, including fir (abies spp.), pine (Pinus spp.), and spruce (Picea spp.). Follow all instructions provided in the "General Information" section of this label.

Broadcast Application Rates

Length of Control	Oryzalin T&O		Minimum Time Between Applications (Months)	Total Amount Allowed Per Year (qt/acre)
	(qt/acre)	(fl oz/1000 sq ft)		
2-4 months	2	1.5	2	8
4-8 months	4	3	2	8

Tank Mix Combinations

Tank mix combinations of Oryzalin T&O plus other labeled herbicides may be used as directed or overtop sprays in established Christmas tree plantings. When applied according to use directions, these tank mixes will provide control of susceptible weed species listed on the respective product labels. Refer to tank mix product labels for specific use directions, precautions, and limitations before use.

Oryzalin T&O Plus Roundup: Apply tank mix combinations of Oryzalin T&O plus Roundup only as directed sprays in Christmas tree plantings. When applied according to use directions, Oryzalin T&O plus Roundup will provide postemergence control of susceptible weed species listed on the label for Oryzalin T&O. Refer to the label for Roundup for specific use directions, precautions, and limitations before use.

Special Use Precautions:

Do not apply to Douglas-fir (*Pseudotsuga menziesii*). Do not apply to seedbeds or seedling transplant beds. Apply only to established plants that have been transplanted into their own growing location for a sufficient period of time to allow the soil to be firmly settled around the roots from packing and rainfall or irrigation.

NONCROPLAND AREAS AND INDUSTRIAL SITES

Tank mix combinations of Oryzalin T&O plus Roundup and many other labeled herbicides may be used to control undesirable vegetation in noncropland areas such as roadsides, rights-of-way, etc. When applied according to use directions, these tank mixes will provide control of susceptible weed species listed on the respective product labels. Refer to tank mix product labels for specific use directions, precautions, and limitations before use.

Broadcast Application Rates

Length of Control	Oryzalin T&O		Minimum Time Between Applications (Months)	Total Amount Allowed Per Year (qt/acre)
	(qt/acre)	(fl oz/1000 sq ft)		
2-4 months	2	1.5	2	6
4-8 months	4	3	4	12
8-12 months	6	4.5	8	12

Industrial Sites - Tank Mix Combinations

Tank mix combinations of Oryzalin T&O plus Roundup, Spike* herbicide, and many other labeled herbicides may be used as overtop sprays to control existing vegetation on industrial sites such as utility substations, highway guard rails, sign posts, and delineators. When applied according to use directions, these tank mixes will provide control of susceptible weed species listed on the respective product labels. Refer to tank mix product labels for specific use directions, precautions, and limitations before use.

WARM SEASON TURFGRASSES

Oryzalin T&O may be applied as a preemergence treatment for control of annual grasses and certain broadleaf weeds in established warm season turf including bahiagrass, bermudagrass, buffalograss, centipedegrass, St. Augustinegrass, zoysiagrass, and established tall fescue growing in warm season areas. Established turf is defined as a dense turf having a well-anchored root system and healthy, vigorous top growth. Use Oryzalin T&O only as a part of a total turf management program that includes good fertilization practices.

Oryzalin T&O may be tank mixed with Gallery* herbicide (California registration pending) and applied preemergence to broaden the spectrum of broadleaf weed control in warm season turf. Refer to the label for Gallery for specific use directions, precautions, and limitations before use.

Any cultural practices that disturb the soil, such as aeration or verticutting, should be done prior to application of Oryzalin T&O.

Oryzalin T&O will not control emerged weeds. Successful preemergence control of weeds listed on this label requires that Oryzalin T&O be applied prior to weed germination and be activated by at least one-half (1/2) inch of rainfall or irrigation within 21 days of application.

Oryzalin T&O may injure turf that is not well established or is stressed or weakened due to unfavorable winter climatic conditions, drought, nematodes, or other factors which damage or weaken turf root systems. Use Oryzalin T&O only on healthy, well-established turf that has a well-anchored root system.

Do not apply Oryzalin T&O in the spring or early summer to tall fescue turfgrass reseeded the previous fall. In such cases, apply Balan* 2.5G granular herbicide at 60-80 pounds per acre in early summer (Round 1) and Oryzalin T&O at 1.5 quarts per acre approximately eight weeks later (Round 2). Do not apply Oryzalin T&O at the single application rate (2 quarts per acre) to established tall fescue; in such cases, apply 1.5 quarts per acre of Oryzalin T&O in an initial application, followed by a second application of 1.5 quarts per acre 8-10 weeks later.

In bermudagrass areas that have been overseeded with winter grasses, a spring application of Oryzalin T&O will thin the overseeded grasses.

Annual Grasses Controlled by Oryzalin T&O

Summer Annuals:

Common Name	Scientific Name
barnyardgrass (watergrass)	<i>Echinochloa crus-galli</i>
crabgrass, large	<i>Digitaria sanguinalis</i>
crabgrass, smooth	<i>Digitaria ischaemum</i>
crabgrass	<i>Digitaria</i> spp.
crowfootgrass	<i>Dactyloctenium aegyptium</i>
cupgrass, southwestern	<i>Enchloa gracilis</i>
foxtail, bristlegass	<i>Setaria magna</i>
foxtail, giant	<i>Setaria fabae</i>
foxtail, green (pigeongrass)	<i>Setaria viridis</i>
foxtail, robust	<i>Setaria robusta</i>
foxtail, yellow	<i>Setaria glauca</i>
goosegrass (silver crabgrass)	<i>Eleusine indica</i>
Johnsongrass (seeding only)	<i>Sorghum halepense</i>

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Annual Grasses Controlled by Oryzalin T&O cont'd.

Summer Annuals:

Common Name ryegrass, Italian sandbur, field	Scientific Name <i>Lolium multiflorum</i> <i>Cenchrus incertus</i>
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Winter Annuals:

Common Name bluegrass, annual	Scientific Name <i>Poa annua</i>
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Annual Broadleaf Weeds Controlled by Oryzalin T&O:

Summer Annuals:

Common Name carpetweed knotweed, prostrate purslane, common	Scientific Name <i>Mollugo verticillata</i> <i>Polygonum aviculare</i> <i>Portulaca oleracea</i>
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Winter Annuals:

chickweed, common herbit	<i>Stellaria media</i> <i>Lamium amplexicaule</i>
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Broadleaf Weeds Suppressed by Oryzalin T&O

Common Name groundsel, common spurge, prostrate woodsorrel, yellow	Scientific Name <i>Senecio vulgaris</i> <i>Euphorbia humistrata</i> <i>Oxalis stricta</i>
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Application Rates, Frequency, and Timing of Application

Oryzalin T&O can be applied in the spring for summer annual grass and broadleaf weed control, and in the fall for annual bluegrass (*Poa annua*) and winter annual broadleaf weed control.

Broadcast Application Rates (Warm Season Turfgrasses)

Use Area	Oryzalin T&O		Minimum Time Between Applications (Months)	Total Amount Allowed Per Year (qt/acre)
	(qt/acre)	(fl oz/1000 sq ft)		
All, except Florida	1.5	1	3	6
Florida	2	1.5	3	6
Florida	1.5	1	3	4.5

1. Summer Annual Grasses and Broadleaf Weeds

Single Application Program: apply 2 quarts per acre of Oryzalin T&O in late winter or early spring, prior to the onset of conditions favorable for annual weed germination.

Split Application Program: As an alternative to a single application program, Oryzalin T&O may be applied in a split application. This program is desirable when the initial application is made well in advance of weed germination and where weed control is desired for a longer period of time. Apply 1.5 quarts per acre of Surfian, followed by a second application of 1.5 quarts per acre 8-10 weeks later.

The second treatment of the split application may follow application of a different preemergence grass herbicide in place of the initial application of Oryzalin T&O.

2. Annual Bluegrass (*Poa annua*) and Winter Annual Broadleaf Weeds

In areas of heavy annual infestation, its elimination will result in temporary thinning of turfgrass cover. Proper fertilization, irrigation, and soil incorporated reseeding should be employed to speed the restoration of desirable turfgrass cover in areas previously occupied annual bluegrass (see section on reseeding).

Apply Oryzalin T&O as a preemergence treatment in late summer or early fall, prior to the expected germination period for annual bluegrass and winter annual broadleaf weeds. If annual bluegrass infestation is severe and its elimination will result in thinning of turfgrass cover, apply Oryzalin T&O at 1.5 quarts per acre. If thinning of turfgrass cover is not a potential problem, Oryzalin T&O may be applied at 2 quarts per acre.

Weed Control in Florida

In Florida, apply 1.5 quarts per acre of Oryzalin T&O three times per year, or every 90-100 days, in the fall, early spring, and early summer. Do not apply more than 1.5 quarts per acre of Oryzalin T&O in any single application.

Application Equipment

Apply Oryzalin T&O evenly over the turfgrass area. Avoid spray pattern skips and overlaps that may result in incomplete coverage or over-application. For best results, use application equipment designed to uniformly broadcast liquid herbicides. Calibrate application equipment prior to use, according to manufacturer's directions. Check equipment frequently to make sure it is working properly and distributing spray uniformly.

Reseeding

Herbicides that control annual weeds may also affect establishment of desirable turfgrass seedlings. Reseeding should be delayed for at least 90-120 days following application of Oryzalin T&O. When reseeding, it is essential that proper cultural practices such as soil cultivation and seedbed preparation, irrigation, and fertilization be followed. For satisfactory reseeding results following use of Oryzalin T&O, the seeding rate should be increased and equipment designed to place seed in full contact with soil (such as the Rogers Aero Seeder) should be employed.

Special Use Precautions:

To avoid possible injury, do not apply Oryzalin T&O to:

- Cool season turfgrass species.
- Golf course putting greens and tees or lawns containing dichondra or cool season turfgrass species.
- Newly sprigged or sodded areas of bermudagrass, St. Augustinegrass, centipede-grass, or zoysiagrass until these turfgrasses are well established and have well-anchored root systems.
- Newly hydromulched areas of bermudagrass until such areas are well established.
- Bermudagrass variety "Sun Turf" when tank mixed with atrazine.

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