

PM 23 55947-42

104-19

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS-767) WASHINGTON, DC 20460 NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> REGISTRATION <input type="checkbox"/> REREISTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)	EPA REGISTRATION NO. 55947-42 TERM OF ISSUANCE Conditional, Expires: January 1, 1993 NAME OF PESTICIDE PRODUCT Carriacoe® 50% herbicide	DATE OF ISSUANCE 7 FEB 1992
NAME AND ADDRESS OF REGISTRANT (Include ZIP code) <div style="text-align: center;"> <p>Sanooz Crop Protection Company 1500 East Tenny Avenue Des Plaines, IL 60018</p> </div>		
NOTE: Changes in labeling formula 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 U.S. EPA registration number.		
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. A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.		
Registration is in no way to be construed as an indorsement or approval of this product by this 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 conditionally registered in accordance with FIFRA section 5(c)(7)(C) provided that you:		
<ol style="list-style-type: none"> 1. Submit data required to change this registration to an unconditional FIFRA section 5(c)(5) registration. The required data with deadlines for submitting the required data are listed on the second page of this notice of pesticide registration. 2. Add the phrase "EPA Registration No. 55947-42" to the label before you release the product for shipment. 3. Add an aerial prohibition statement under "Directions for use". 4. Submit five (5) copies of the final printed labeling before you release the product for shipment. 		
If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 5(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.		
<div style="display: flex; justify-content: space-between;"> <div data-bbox="145 1694 788 2020"> enclosure </div> <div data-bbox="788 1694 1609 2020"> Joanne L. Miller Product Manager (23) fungicide-herbicide Branch Registration Division (TS-767) </div> </div>		
<div style="display: flex; justify-content: space-between;"> <div data-bbox="145 2020 1254 2089"> <input type="checkbox"/> ATTACHMENT IS APPLICABLE SIGNATURE OF APPROVING OFFICIAL <i>Joanne L. Miller</i> </div> <div data-bbox="1254 2020 1609 2089"> DATE <i>2-2-92</i> </div> </div>		

BEST AVAILABLE COPY

CONTAINER LABEL

BARRICADE® 65WG Herbicide

ACCEPTED
with COMMENTS
in EPA Letter, Dated:

7 FEB 1992

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

55947-43

ACTIVE INGREDIENTS:

Prodiamine [N³,N³-Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-phenylenediamine]..... **65.0%**

INERT INGREDIENTS:..... **35.0%**

Total **100.0%**

For selective preemergence control of grass and broadleaf weeds in established turf grasses and landscape ornamentals.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See the following section, Precautionary Statements, Hazards To Humans and Domestic Animals, for additional information.

Net Weight: 5 or 10 lbs.

EPA Reg. No. 55947-UG
EPA Est. No.

SANDOZ CROP PROTECTION CORPORATION
1300 E. Touhy Avenue
Des Plaines, IL 60018

December, 1991

3-11

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

CAUTION

Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Prolonged or frequently repeated skin contact, while mixing or handling the concentrated material, may cause allergic reactions in some individuals. During mixing and loading of concentrate material wear chemical resistant gloves. Wash non-disposable gloves thoroughly with soap and water before removing.

First Aid

If on skin: Wash with soap and water. Rinse thoroughly.

If inhaled: Remove to clear air.

If in eyes: Flush thoroughly with water for several minutes. Contact a physician if irritation persists.

ENVIRONMENTAL HAZARDS

This product has low solubility in water. At the limit of solubility, this product is not toxic to fish. However, at concentrations substantially above the level of water solubility, it may be 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. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Refer to the DIRECTIONS FOR USE booklet attached to this container for use directions and additional precautionary statements. Apply this product only as directed in the attached label booklet. For additional copies of the DIRECTIONS FOR USE booklet, write the manufacturer.

Do not apply this product through any type of irrigation system.

BEST AVAILABLE COPY

STORAGE AND DISPOSAL

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

STORAGE

Store in original container away from fertilizer, feed, or food stuffs and separated from other pesticides.

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

Paper bags and boxes: Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or at an incineration facility, or; if allowed by state and local authorities, by burning locally. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIMITATION OF LIABILITY

NOTICE: Read this Limitation of Warranty and Limitation of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

It is impossible to eliminate all risks inherently associated with the use of this product. Turf grass injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Sandoz or seller. All such risks shall be assumed by buyer or user.

Sandoz warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, under normal use conditions, subject to the risks described above. **SANDOZ MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.** In no event shall Sandoz or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product.

Sandoz and seller offer this product, and buyer and user accept it, subject to the foregoing limitations of warranty and limitation of liability, that may not be modified by any oral or written agreement.

BEST AVAILABLE COPY

DIRECTIONS FOR USE BOOKLET**BARRICADE® 65WG Herbicide****ACTIVE INGREDIENTS:.....**

Prodiamine [N³,N³-Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-phenylenediamine]..... 65.0%

INERT INGREDIENTS: 35.0%

Total 100.0%

For selective preemergence control of grass and broadleaf weeds in established turf grasses and landscape ornamentals.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See the following section, **Precautionary Statements, Hazards To Humans and Domestic Animals**, for additional information.

EPA Reg. No. 55947-UG
EPA Est. No.

BEST AVAILABLE COPY

SANDOZ CROP PROTECTION CORPORATION
1300 E. Touhy Avenue
Des Plaines, IL 60018

7 of 10

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

CAUTION

Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Prolonged or frequently repeated skin contact, while mixing or handling the concentrated material, may cause allergic reactions in some individuals. During mixing and loading of concentrate material wear chemical resistant gloves. Wash non-disposable gloves thoroughly with soap and water before removing.

First Aid

If on skin: Wash with soap and water. Rinse thoroughly.

If inhaled: Remove to clear air.

If in eyes: Flush thoroughly with water for several minutes. Contact a physician if irritation persists.

ENVIRONMENTAL HAZARDS

This product has low solubility in water. At the limit of solubility, this product is not toxic to fish. However, at concentrations substantially above the level of water solubility, it may be 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. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

BARRICADE 65WG is a selective preemergence herbicide that provides residual control of many grass and broadleaf weeds in turf grasses and landscapes. BARRICADE 65WG controls susceptible weeds by inhibiting weed seeds germination and root development. For most effective weed control BARRICADE 65WG must be incorporated by 1/2 inch of rainfall, irrigation, or shallow mechanical incorporation. Incorporation should take place as soon as possible after application and should not be delayed past 14 days from the date of application.

All applicable directions, restrictions, and precautions on the labels of EPA registered tank mix partners are to be followed.

Do not apply this product through any type of irrigation system.

Mixing and Application

95

Apply BARRICADE 65WG in a minimum of 20 gallons of carrier per treated acre (1/2 gallon / 1000 ft²) using a calibrated, low pressure sprayer with 50 mesh or coarser screens. A broadcast boom or hand held wand designed for herbicide or insecticide application will provide the best results. Select nozzle pressure and gallonage to provide complete coverage.

A spray colorant may be used to modify the color of BARRICADE 65WG to improve application accuracy by minimizing swath skips and overlaps.

BARRICADE 65WG can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is used, a compatibility test should be made prior to mixing (see Compatibility Test in this section for instructions).

Thorough mixing of BARRICADE 65WG in the spray tank is essential for uniform application. Fill the spray tank half full with clean water or fluid fertilizer. Start agitation and check to ensure it is working properly.

If water is used as the carrier, BARRICADE 65WG herbicide can be poured directly into the tank.

If fluid fertilizer is used as the carrier, first form a slurry by mixing BARRICADE 65WG with at least 2 parts clean water in a separate container. Pour the slurry into the spray tank while maintaining agitation.

Add the rest of the water or fluid fertilizer to obtain the final spray volume. Maintain vigorous agitation in the spray tank before and during the application. This will ensure a well mixed spray suspension.

Thoroughly clean the sprayer after use by flushing the system with water containing a detergent. Do not allow spray suspension to dry in the tank.

BARRICADE 65WG may be mixed with certain other EPA registered herbicides to provide a broader spectrum of control or to control emerged weeds. See **Mixing Order** in this section and the **ESTABLISHED TURF** section for specific recommendations.

BEST AVAILABLE COPY

Mixing Order for Tank Mixtures

When mixing BARRICADE 65WG with other components (carrier and pesticide products) add the products to the spray tank in the following order:

- 1 - Water dispersible granules (WG formulations) and wettable powders (WP formulations). Wettable powders should be premixed with a small amount of water to form a slurry before addition; water dispersible granules can be added directly during filling. Allow the product to disperse completely before other products are added.
- 2 - Flowable liquids (FL or SC).
- 3 - Emulsifiable concentrates (EC).
- 4 - Surfactants approved for application to turf or landscapes. Check surfactant label before use.

Compatibility Test

Before mixing BARRICADE 65WG with other pesticides in the spray tank, test the compatibility by mixing all components (carrier and pesticide products) in a small container in proportionate quantities (see following table).

Amount of Component to Add to One Pint of Spray Carrier
(Assuming Volume is 25 Gallons per Acre)

COMPONENT FORMULATIONS	—RATE PER—		LEVEL TEASPOONS
	ACRE	1000 Ft ²	
Dry	1.0 lb	0.4 oz	1.5
Liquid	1.0 pt	0.4 oz	0.5

If components do not ball-up or form flakes, sludge, gels, oily films or layers, or other precipitates, then the tested spray mix is compatible. Incompatibility in any of the above forms will usually occur within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Rerun the above compatibility test with commercially available compatibility agents until a suitable compatibility agent is identified.

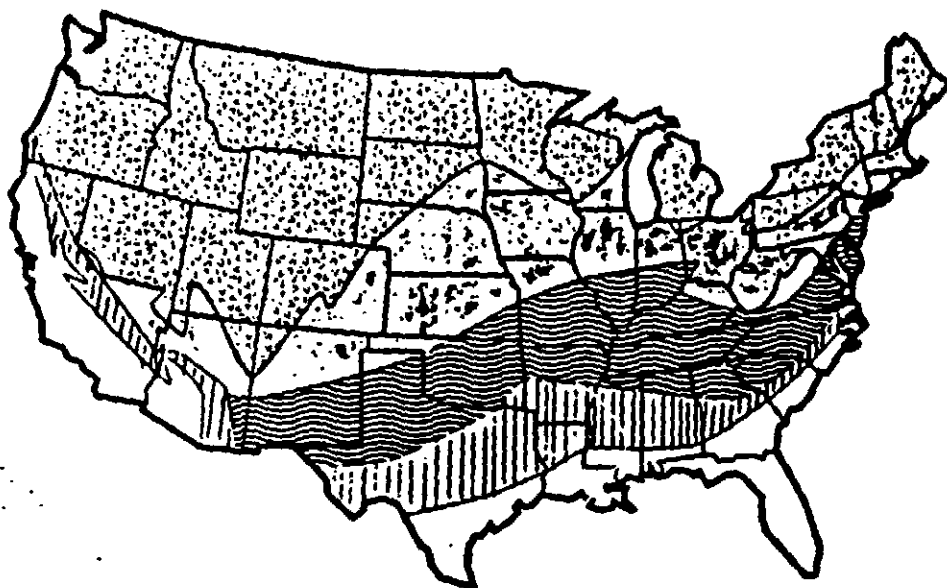
ESTABLISHED TURF






BARRICADE 65WG is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established grass turf. The species of turf grass determines the maximum amount of this product that may be applied during a year.

Most effective weed control in turf grasses will be obtained when BARRICADE 65WG is activated by at least 1/2 inch of rainfall or irrigation within 14 days after application and prior to weed seed germination. See the map below for approximate crabgrass seed germination dates.

CRABGRASS SEED GERMINATION DATES

Approximate Date



-  After May 30
-  After May 10
-  After April 20
-  After March 20
-  January 1 to March 20

BEST AVAILABLE COPY

Dep 12

USE PRECAUTIONS

The following use precautions apply to the use of BARRICADE 65WG in turf grasses:

Application of BARRICADE 65WG may thin emerged annual bluegrass and newly over-seeded grasses.

Do not apply to FALL SEEDED TURF treated the following spring until after the second mowing.

Do not apply to SPRING SEEDED TURF or newly set sod until the following year.

Application of BARRICADE 65WG to turf stressed by drought, low fertility, or pest damage may result in turf injury.

Disturbing the herbicide barrier with cultural practices such as aerifying or disking may result in reduced weed control.

Do not apply BARRICADE 65WG to tees or greens, or to areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species.

BEST AVAILABLE COPY

Rates and Timing

BARRICADE 65WG may be applied as a single application or as a sequential application to control weeds germinating throughout the year. All applications must be made prior to germination of the target weeds.

Maximum use rate selection should be based on turf species. The length of time of residual weed control provided by BARRICADE 65WG is related to the rate applied.

Maximum Annual Rates

BARRICADE 65WG is recommended for use on the following turf grass species. The total amount of BARRICADE 65WG applied during one year must not exceed the amounts listed.

Maximum rate per calendar year of BARRICADE 65WG

Turf Species:	Lbs/ A	Oz/1000 Ft ²
Bermudagrass Centipedegrass Seashore Paspalum Tall Fescue Zoysia	2.30	0.83
Perennial Bluegrass Perennial Ryegrass	1.50	0.55
Creeping Red Fescue St. Augustinegrass	1.15	0.40
Creeping Bentgrass min. 1/2 inch height	1.00	0.37
Bermudagrass newly sprigged or plugged	0.80	0.30

- Do not apply more than 1.15 lbs/A of BARRICADE 65WG or the maximum yearly rate listed above per application, whichever is less.
- Do not make more than 2 applications per calendar year.
- If making a second application, wait at least 60 days before making the second application.

Weeds Controlled

The following table lists use rates recommended for control of indicated weeds for approximately 2-6 months.

Use the higher rate within the listed range for longer control in areas with extended germination periods (see Crabgrass Seed Germination Date Map, page 10).

Application Rates and Weeds Controlled

Rate of BARRICADE 65WG Lbs./A (Oz./1000 Ft ²)	Weeds Controlled
0.50-1.15 (0.18-0.40)	Crabgrass (large, smooth)
0.75-1.15 (0.28-0.40)	Annual Bluegrass Common Chickweed Prostrate Spurge
1.15-1.50 ² (0.40-0.55)	Foxtail - Yellow Shepardspurge ¹ Henbit Knotweed
1.50-2.30 ² (0.55-0.83)	Goosegrass ³ Rescuegrass ⁴

Do not exceed the maximum annual application rates recommended for the turf species. All applications must be made prior to germination of the target weeds.

1. Fall Application.
2. Weeds requiring rates greater than 1.15 lbs./A will require a sequential application (see Rates and Timings).
3. For the best control of goosegrass make a sequential application of 1.15 lbs./A followed after 60 days with 0.38 to 1.15 lb./A of product.
4. Suppression only.

BEST AVAILABLE COPY

Overseeding / Reseeding

BARRICADE 65WG will inhibit the germination of turf species if overseeded too soon after application. Wait 4-6 months per 0.75 pound of BARRICADE 65WG applied when grass seed is to be broadcasted over the turf surface. This overseeding interval can be shortened to 3-4 months per 0.75 pound when grass seed is drilled directly into the soil. The interval between application and overseeding / reseeding is dependent on the application rate, soil temperature, and soil moisture. A shorter period is required if growing conditions are warm and wet, while a longer interval is needed if conditions are cool and dry.

Turf Tank Mixes

Refer to Mixing and Application if mixing BARRICADE 65WG with fluid fertilizer is planned.

BARRICADE 65WG may be tank mixed with other registered turf herbicides. Tank mixes are for use only in states where the tank mix product and application site are registered.

Consult the label(s) of the individual tank mix product(s) for use, rate recommendations, application timing, weeds controlled, turf grass safety and specific precautions and /restrictions.

Before mixing tank mix partners in the spray tank it is advisable to test compatibility by mixing the products in a small container. See the Compatibility Test section under Mixing and Application.

BEST AVAILABLE COPY

LANDSCAPE ORNAMENTALS

BARRICADE 65WG Herbicide will not harm most nearby established ornamental trees, shrubs and flowers. The following species have shown tolerance to BARRICADE 65WG:

<u>Scientific name</u>	<u>Common name</u>
Acer palmatum	Japanese Maple
A. platanoides	Norway Maple
Actinidia chinensis	Kiwi*
Agapanthus africanus	Lily-of-the-Nile
Arctostaphylos densiflora	Vine Hill Manzanita
Arctotheca calendula	Cape Weed
Aucuba japonica	Japanese Aucuba
Barberis gladwynensis	
B. julianae	Wintergreen Barberry
B. mentorensis	Mentor Barberry
B. thunbergii	Japanese Barberry
B. verruculosa	Warty Barberry
Buxus microphylla	Japanese Boxwood
Callistemon viminalis	Weeping Bottlebrush
Calluna vulgaris	Scotch Heather
Carpobrotus edulis	Hottentot Fig (Ice Plant)
Cassia artemisoides	Heathery Cassia
Ceanothus rigidus	Wild Lilac
Chamaecyparis pisifera	False Cypress
Cleyera japonica	Cleyera
Cornus florida	Flowering Dogwood
C. stolonifera	American Dogwood
Cortaderia selloana	Pampas Grass
Cotoneaster apiculatus	Cranberry Cotoneaster
C. buxifolius	
C. dammeri	Bearberry Cotoneaster
C. microphyllus	Rockspray Cotoneaster
Cupressus sempervirens	Italian Cypress
Delasperma alba	White Trailing Ice Plant
Dodonea viscosa	Hop Bush
Elaeagnus pungens	Silverberry
Euonymus fortunei	Wintercreeper Euonymus

*Ornamental species only. Do not use on food producing trees or vines.

17 of 18

<u>Scientific name</u>	<u>Common name</u>
<i>E. japonica</i>	Evergreen Euonymous
<i>E. kiautschovica</i>	Spreading Euonymous
<i>Fatsia japonica</i>	Japanese Aralia
<i>Forsythia intermedia</i>	Border Forsythia
<i>F. viridissima</i>	Greenstem Forsythia
<i>Gardenia jasminoides</i>	Gardenia, Cape-Jasmine
<i>Hedera helix</i>	English Ivy
<i>Hibiscus rosa-sinensis</i>	Chinese Hibiscus
<i>Ilex cornuta</i>	Chinese Holly
<i>I. crenata</i>	Japanese Holly
<i>I. opaca</i>	American Holly
<i>I. pernyi</i>	
<i>Jasminum nudiflorum</i>	Winter Jasmine
<i>Juniperus chinensis</i>	Chinese Juniper
<i>J. conferta</i>	Shore Juniper
<i>J. horizontalis</i>	Creeping Juniper
<i>Juglans sp.</i>	Walnut*
<i>Justicia brandegeana</i>	Shrimp Plant
<i>Lagerstromia indica</i>	Crepe Myrtle
<i>Ligustrum amurense</i>	Amur Privet
<i>L. japonicum</i>	Japanese Privet
<i>L. lucidum</i>	Glossy Privet
<i>Liriope muscari</i>	Big Blue Lily Turf
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>L. tatarica</i>	Tatarian Honeysuckle
<i>Maleophora luteola</i>	Ice Plant
<i>Malus sp.</i>	Crabapple
<i>Nandina domestica</i>	Heavenly Bamboo
<i>Olea europae</i>	Olive*
<i>Ophiopogon japonicus</i>	Mondo Grass
<i>Osteospermum fruticosum</i>	Trailing African Daisy
<i>Oxydendrum arboreum</i>	Sourwood
<i>Persea americana</i>	Avocado*
<i>Photinia fraseri</i>	Fraser's Photinia
<i>Picea abies</i>	Norway Spruce
<i>Pieris japonica</i>	Lily-of-the-Valley Shrub

*Ornamental species only. Do not use on food producing trees or vines.

Scientific name	Common name
<i>Pinus brutia</i>	Calabrian Pine
<i>P. canariensis</i>	Canary Island Pine
<i>P. halepensis</i>	Aleppo Pine
<i>P. nigra</i>	Austrian Black Pine
<i>P. radiata</i>	Monterey Pine
<i>P. thunbergiana</i>	Japanese Black Pine
<i>P. strobus</i>	Eastern White Pine
<i>P. sylvestris</i>	Scotch Pine
<i>Pistachio</i> sp.	Pistachio*
<i>Pittosporum rhombifolium</i>	Queensland Pittosporum
<i>P. tobira</i>	Mock Orange
<i>Podocarpus macrophyllus</i>	Japanese Yew
<i>Prunus laurocerasus</i>	English Laurel
<i>Prunus</i> sp.	Almond, Apricot, Nectarine, Peach, Plum and Prune*
<i>Pyracantha coccinea</i>	Firethorn
<i>P. fortuneana</i>	Firethorn
<i>P. koidzumii</i>	Firethorn
<i>Pyrus</i> sp.	Bradford Pear sp.
<i>Quercus rubra</i>	Red Oak
<i>Raphiolepis indica</i>	Indian Hawthorne
<i>Rhododendron</i>	'Coral Bells'
(including <i>Azalea</i>)	'Formosa'
	'Hino-crimson'
	'PJM'
	'Roseum Elegans'
<i>Rosa banksiae</i>	Lady Bank's Rose
<i>Rosmarinus officinalis</i>	Rosemary
<i>Rumohra adiantiformis</i>	Leatherleaf Fern
<i>Santolina virens</i>	
<i>Sedum album</i>	Stonecrop
<i>Syzygium paniculatum</i>	Japanese Boxcherry
<i>Taxus cuspidata</i>	Japanese Yew
<i>T. media</i>	Yew
<i>Thuja occidentalis</i>	American Arborvitae
<i>Trachelospermum asiaticum</i>	Star Jasmine
<i>Tsuga canadensis</i>	Canada Hemlock
<i>Viburnum japonicum</i>	Japanese Viburnum
<i>V. odoratissimum</i>	Sweet Viburnum

*Ornamental species only. Do not use on food producing trees or shrubs.

Scientific name**Common name****V. plicatum****Japanese Snowball****V. rigidum****Canary Island Viburnum****V. tinus****Laurustinus****V. trilobium****Cranberry Bush****V. wrightii****Vinca minor****Dwarf Periwinkle****Vitis sp.****Grape*****Weigela florida****Old Fashioned Weigela****Yucca aloifolia****Spanish Bayonet****Yucca filamentosa****Yucca****Adam's Needle**

***Ornamental species only. Do not use on food producing trees or vines.**

BEST AVAILABLE COPY