

5/29/97

PM 23

707-247

P7 1/30

MAY 29 1997

Mr. James D. Davis  
Rohm and Haas Company  
100 Independence Mall West  
Philadelphia, PA 19106-2399

Dear Mr. Davis:

Subject: Dimension® 2 F.G. Turf and Ornamental Herbicide  
Crab-Buster® 2 F.G. Lawn and Ornamental Herbicide  
EPA Registration No. 707-247  
Application and Letter Dated August 19, 1996 and  
Resubmissions with Your Letters Dated: October 2,  
1996 and May 15, 1997, Request To Amend Labeling  
To Allow Use on Landscape Ornamentals at the Maximum  
Dosimetry as Allow for Use on Turf, and New  
Registration Number, Simplified Use Program Table I  
and Other Use Instructions Reflecting Field Experience  
Over the Last Two Years

The proposed labeling submitted with your May 15, 1997  
letter has been reviewed and found acceptable for registration  
under the Federal Insecticide, Fungicide and Rodenticide Act  
(FIFRA), as amended, provided that you revise the labeling  
as indicated by the following comments:

For: "Crab-Buster 2 F.G. Lawn and Ornamental Herbicide":

1. On page 7, under the section "General Information - Landscape Ornamentals" in the first paragraph delete the sentence that reads: "The user should always exercise reasonable judgement and caution with this product." Also, delete that claim under the section "Tolerant Ornamentals"
2. Under the section "Use Rates" delete the redundant phrase "prior to weed seed germination".
3. Under the section "Precautions" correct the spelling of "Nematodes".
4. Submit one (1) copy of the final printed labeling before you release the product for shipment, under the subject amended labeling.

For: "Dimension 2 F.G. Turf and Ornamental Herbicide":

CONCURRENCES					
1. Correct the spelling of "ornamental" in the first line of label.					

12-701

OFFICIAL FILE COPY

BEST AVAILABLE COPY

2. Revise the second sentence in the "General Information - Landscape Ornamentals" section to read: "It may be applied to soil surfaces where ornamental plants are grown for aesthetic purposes in ornamental gardens, parks, golf courses and residential properties. Omit the last phrase "and other locations". In the second paragraph delete the words "excellent" and "to this product" and replace the word "on" with the word "for". Delete the phrase: "Until familiar with the performance of this product" and start the sentence to read: "Under your growing conditions a limited areas involving only a few plants should be treated for tolerance evaluation prior to large-scale applications.
3. Add "Do not apply in Nassau and Suffolk counties of New York." to the DO NOT statement under "Use Rates".
4. Delete the statement "The user should always exercise reasonable judgement and caution with this product", which is repeated in the General Information - Landscape Ornamentals Section on page 6.
5. On page 6, add the New York dosage restriction to the "Use Rate" section. The sentence should read: "DO NOT apply more than 5.8 oz. of this product/1000 sq. ft. per application, and no more than 26.4 oz. (8.8 oz. in New York) of this product/1000 sq. ft. per year."
6. Revise the PRECAUTIONS statements that read:
  - o Do not apply to plants...., to read "Do not apply to soil around ornamental plants ....."
  - o Do not apply under conditions which might...., to read: "Do not apply under conditions that would ....."
7. Under "Tolerant Ornamentals" revise the first sentence to read: "When applied as directed under the conditions described on this label, ornamentals listed below have shown tolerance in field trials."; and add a statement that reads: "Follow directions given above to determine plant tolerance under your growing conditions prior to large scale use."

**BEST AVAILABLE COPY**

SYMBOL	CONCURRENCES					

320-1 (12-70)

OFFICIAL FILE COPY

3/56

- 8. Submit one (1) copy of your final printed labeling before your release the product for shipment, under the subject amended labeling.

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 constitutes acceptance of these conditions.

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

Sincerely yours,

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

Enclosures (2 Labels)

E.Wilson:Diskette Dimension: 05-29-93

CONCURRENCES




# DIMENSION<sup>®</sup> 2 F.G.

**Turf and Ornamental HERBICIDE**

Dimension 2 F.G. is a selective herbicide that provides control of listed annual grasses and broadleaf weeds in ornamental landscape areas, established lawns and ornamental turf, including golf course fairways, roughs, and tee boxes.

~~Not for use on plants being grown for sale or other commercial use or for commercial seed production or for research purposes.~~

~~Not for use on plants intended for aesthetic purposes or climatic modification and being grown in interior landscapes, ornamental gardens or parks, or on golf courses or lawns and grounds.~~

*In New York State this product may only be used by professional applicators at no more than 24 pounds (0.5 pounds active ingredient) per year and is prohibited from use in Nassau and Suffolk Counties.*

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated**

**MAY 29 1997**

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

**707-247**

### ACTIVE INGREDIENTS

\*Dithiopyr, 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-  
6-(trifluoromethyl)-S,S-dimethyl ester ----- 2.1%  
INERT INGREDIENTS ----- 97.9%

TOTAL 100.00%

\*This product contains 1 pound of the active ingredient, dithiopyr, per 50 pound bag.  
Product protected by U.S. Patent No. 4,692,184. Other patents pending.

**EPA Reg. No. 707-247**

Read the entire label before using this product. ...

Use only according to label instructions.

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

### Keep Out of Reach of Children CAUTION

**FIRST AID:** IF IN EYES- Immediately flush with plenty of water. Get medical attention if irritation persists.  
IF INHALED- Remove individual to fresh air. Seek medical attention if breathing difficulty develops.

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION!**  
**CAUSES EYE IRRITATION.**  
**HARMFUL IF INHALED.**

Avoid contact with eyes or clothing.  
Avoid breathing dust.

Wash thoroughly with soap and water after handling.  
Remove contaminated clothing and wash before reuse.

Prolonged or frequently repeated skin contact while handling this material may cause allergic reaction in some individuals.

### 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.

## DIRECTIONS FOR USE

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

5/30

### CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. **ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.** Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. **IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.**

### STORAGE AND DISPOSAL

**STORAGE:** Store this product only in its original container in a dry, cool, secured storage area. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

**PRODUCT DISPOSAL:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

**EMPTY CONTAINER DISPOSAL:** Do not reuse bag. Completely empty bag into application equipment. Dispose of emptied bag(s) in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**SPILL:** In case of spill, sweep up material and dispose of material according to "product disposal" directions listed above.

### GENERAL INFORMATION FOR TURF USE

This product is a selective herbicide that provides control of crabgrass and other annual grasses and broadleaf weeds in established lawns and ornamental turfs, including golf course fairways, roughs, and tee boxes. This product will not harm nearby established ornamentals when used according to label directions.

### USE PRECAUTIONS

#### Turfgrass Safety

This product may be used on seeded, sodded, or sprigged lawns and ornamental turfs that are well-established. The grass must have developed a good root system and a uniform stand, and have received at least two mowings following its seeding, sodding, or sprigging before it can receive its first application of this product. Use of this product on lawns and ornamental turfs that are not well-established, or on those that have been weakened by weather-, pest-, disease-, chemical-, or mechanical-related stress, may increase the chances for turf injury.

This product should only be applied to lawns and ornamental turfs that are composed of the following turfgrass species that have been determined to be tolerant to applications of this product. When applied as directed under the conditions described, the following established turfgrasses are tolerant to this product:

#### Cool-Season Grasses

Bentgrass, creeping*	<i>Agrostis palustris</i>
Bluegrass, Kentucky	<i>Poa pratensis</i>
Fescue, fine**	<i>Festuca rubra</i>
Fescue, tall	<i>Festuca arundinacea</i>
Ryegrass, perennial	<i>Lolium perenne</i>

#### Warm-Season Grasses

Bahiagrass	<i>Paspalum notatum</i>
Bermudagrass	<i>Cynodon dactylon</i>
Buffalograss***	<i>Buchloe dactyloides</i>
Carpentergrass	<i>Axonopus affinis</i>
Centipedegrass	<i>Eremochloa ophiuroides</i>
Kikuyugrass	<i>Pennisetum clandestinum</i>
St. Augustinegrass	<i>Stenotaphrum secundatum</i>
Zoysiagrass	<i>Zoysia japonica</i>

\*Use of this product on certain varieties of creeping bentgrass, such as 'Cohansey', 'Carmen', 'Seaside', and 'Washington' may result in undesirable turfgrass injury. Not all varieties of creeping bentgrass have been tested.

DO NOT apply this product to Colonial bentgrass (*Agrostis tenuis*) varieties.

\*\*Use of this product on certain varieties of fine fescue may result in undesirable turf injury. 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'. Not all varieties of fine fescue have been tested.

\*\*\*DO NOT use this product on seedling buffalograss in the spring of the first year of establishment until the turfgrass is fully green and has established new roots.

NOTE: It is not possible to evaluate all turfgrass varieties for tolerance to DIMENSION 2 F.G. Turf and Ornamental Herbicide. It is suggested that the user evaluate the response of turfgrass varieties to this product on a limited area, at recommended use rates, prior to initiating large-scale use.

**Reseeding, Overseeding, or Sprigging**

Reseeding, overseeding, or sprigging of treated areas within 4 months after application of this product may prevent the establishment of desirable turfgrasses. 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.

**Golf Course Putting Greens**

Do not use this product on Golf Course Putting Greens.

**Other Use Precautions**

The early postemergence crabgrass control described below is limited. Postemergence applications are only effective on crabgrass if applied before crabgrass has displayed its fifth leaf or first tiller. For best results, cultural practices that disturb the soil, such as core-, spike-, or hydro-aerification, and verticutting, should be done before application of this product. DO NOT apply this product until grass has recovered from these cultural practices.

- DO NOT use clippings from treated turf for mulching around vegetables or fruit trees.
- Keep people and pets off treated areas until dust has settled.

**APPLICATION DIRECTIONS**

**Control of Crabgrass**

Preemergence and Early Postemergence Control.

- This product provides "preemergence" control of crabgrass (including the large, smooth, and southern species) when applied prior to the emergence of crabgrass from the ground in established lawns and ornamental turfs.

It can also provide "early postemergence" control of crabgrass. Postemergence crabgrass control will be obtained only when this product is applied prior to the tillering of crabgrass, which generally corresponds to the time when you can first see the crabgrass plants in the lawn or turf. The practical benefit of this product's early postemergence activity is that it can give the user a 2-4 week longer period of time to make applications to control crabgrass.

Application Frequency and Timing.

This product may be applied as a single application or as a split application for crabgrass control in the spring, summer, or fall.

- DO NOT apply more than 8.8 oz. of this product/1000 sq. ft. per application, and no more than 26.4 oz. (8.8 oz. in New York) of this product/1000 sq. ft. per year.

Spring Applications.

For single applications made in the spring or early summer, this product should be applied at the appropriate rate corresponding to one of the control programs listed in Table 1 below, depending on the user's location, the turfgrass mowing height, and whether the use is preemergence or early postemergence at the time of the application. The duration of residual weed control provided by this product is directly related to the total rate applied, but will vary somewhat depending on weather, weed pressure, turfgrass competitiveness, and the user's location within a region.

- Use Program 1 (given in Table 1, below) for preemergence control at sites where the turfgrass is cut high (e.g., homeowner lawns). This program provides 3-5 months of preemergence crabgrass control. This program should not be used for early postemergence crabgrass control.

Use Program 2 for preemergence control at sites where (a) turfgrass is in low (e.g., golf fairways) and (b) turfgrass maintenance or weed control has not been conducted during the previous year. This program provides 4-6 months of preemergence crabgrass control. This program may also be used for early postemergence control of crabgrass.

- Where split fertilizer applications are recommended, a rate in Table 1 may be applied in two applications made 6-10 weeks apart and prior to crabgrass emergence.

**Table 1. Recommended Application Use Rates For Crabgrass (oz. of product/1000 sq. ft.)**

PROGRAM	1	2
USE (turfgrass only)	Preemergence (high)	Preemergence (low) Postemergence
REGION		
North	2.2	4.4
Transition	3.2	6.4
South	4.4	8.8
Coastal South	6.4	8.8

\*DO NOT apply more than 8.8 oz. of this product/1000 sq. ft. per application, and no more than 26.4 oz. (8.8 oz. in New York) of this product/1000 sq. ft. per year. Postemergence control is limited; see "Crabgrass Control" and "Precautions" sections above. Regions include areas listed below.

- North: all other areas.
- Transition: DE, KS, KY, MD, MO, NJ, VA, southeastern PA, southern areas of IL, IN, OH, & coastal areas of CT, NY, & RI.
- South: AL, AR, AZ, CA, GA, LA, MS, NC, NM, NV, OK, SC, TN, & TX
- Coastal South: HI, FL, & southern coastal areas of AL, GA, LA, MS, NC, SC, & TX.

\*\*May require split or sequential applications for full control.

**Fall Applications.**

- This product can also be applied in the late summer or early fall (late August through November) at the "Program 2" use rates listed in Table 1 to provide control of crabgrass through the early part of the next spring.
- The fall application must be followed by an appropriate spring application to provide season-long control.

**Tips for Improved Control.**

- For best results, apply this product within a few days after mowing and delay mowing again for a few days after the application.
- When treated lawn or ornamental turf areas are watered or receive significant rainfall within a few days after application of this product, improved weed control may result.
- Use of split (half-rate) applications spaced 6-8 weeks apart may provide improved weed control.

### Control of Other Grass and Broadleaf Weeds

#### Spring Applications

Used as directed for crabgrass control in the spring (Table 1), this product will also control or suppress the following weeds when applied prior to their emergence:

- |                                |  |
|--------------------------------|--|
| barnyardgrass                  | lespedeza (common)                               |
| bluegrass (annual, roughstalk) | oxalis (buttercup, creeping & yellow woodsorrel) |
| crowfootgrass                  |  |
| foxtail (yellow & green)*      | purslane (common)                                |
| goosegrass                     | speedwell (corn)                                 |
| kikuyugrass                    | spurge (prostrate & spotted)                     |
| ryegrass (annual & perennial)  |  |
| smutgrass                      |  |

\*Also controlled at the Program 2 rates.

#### Fall Applications

Used as directed for late summer or early fall use for crabgrass control through the early part of the next spring (Table 1), this product will also control or suppress the following weeds when applied prior to their emergence:

- |                                |                     |
|--------------------------------|---------------------|
| bluegrass (annual, roughstalk) | geranium (Carolina) |
| bittercress                    | parsley-piert       |
| chickweed                      | pineappleweed       |
| henbit                         | shepherdspurse      |

### APPLICATION EQUIPMENT AND INSTRUCTIONS

Apply this product with drop or rotary-type spreaders designed to apply granular herbicides. Avoid the use of spreaders that would apply this product in narrow rows or concentrated bands. Before each application, calibrate the spreader according to the equipment manufacturer's directions for adjusting the spreader settings such that the spreader delivers the appropriate application rate recommended above. Apply this product uniformly over the lawn or ornamental turf 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. Avoid streaking, skips, or overlaps during application. Check equipment frequently to ensure equipment is functioning properly and applying uniform distribution of granules.



**GENERAL INFORMATION - LANDSCAPE ORNAMENTALS**

**DIMENSION 2 P.G. Turf and Ornamental Herbicide** provides preemergence control of listed annual grass and broadleaf weeds in landscape ornamentals. It is intended for use on plants grown for aesthetic purposes in ornamental gardens, parks, golf courses, and residential properties and other locations.

Ornamental plants on this label have shown excellent tolerance to **DIMENSION 2 P.G.** when applied as directed. It is impossible, however, to evaluate tolerance of this product on all ornamental plant species or varieties or under all possible growing conditions. Until familiar with the performance of this product under user growing conditions, a limited number of plants should be treated for tolerance evaluation prior to initiating large scale applications. The user should always exercise reasonable judgment and caution with this product.

**USE RATES**

Apply **DIMENSION 2 P.G. Turf and Ornamental Herbicide** with a properly calibrated spreader which will assure accurate even particle distribution. This product may be applied as a single application or as a split application prior to weed seed germination.

Refer to the following table for product recommendations when treating a small area.

DO NOT apply more than 8.8 oz. of this product/1000 sq. ft. per application and no more than 26.4 of this product/1000 sq. ft. per year.

Pounds Product/Acre	Ounces Product/1000 Square Feet	Ounces Product/100 Square Feet
24	28	0.88 (25 grams)

**APPLICATION TIMING AND RECOMMENDATIONS**

**DIMENSION 2 P.G. Turf and Ornamental Herbicide** is a preemergence herbicide that will not control established weeds. Make applications prior to weed seed germination or in bare ground. The best weed control is obtained when applied to soil that is free of clods, weeds, and debris such as leaves. Prior to making an application control existing vegetation by hand weeding, cultivation or with a postemergence herbicide. Once an application of this product has been made, do not disturb the soil surface as the herbicide barrier will be broken.

**PRECAUTIONS**

- \* Only apply this product to established ornamentals.
- \* Do not apply this product directly to bare root of ornamental plants as injury may result.
- \* Do not incorporate this product into soil. Dilution of active ingredient and possible injury to plant roots may occur.
- \* Do not apply to plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, wind injury, hail, frost damage, winter injury, injury from previously applied pesticides or injury due to insects, nematodes or disease.
- \* To avoid foliar damage to ornamentals, irrigate immediately after application to remove herbicide particles from the foliage.
- \* Do not apply under conditions which might affect product distribution. Wind could affect distribution and move product onto sensitive species. Uneven product distribution will result in uneven weed control.
- \* Do not apply this product on grasses grown for seed.
- \* Do not graze livestock or feed forage cut from areas treated with this product.

**TOLERANT ORNAMENTALS**

When applied as directed under the conditions described, this product has shown acceptable tolerance on the following ornamental species. However, this product has not been tested on all cultivars of each species or under all possible growing conditions. The user should always exercise reasonable judgment and caution when using this product.

Common Name	Botanical Name	Tolerant Cultivars
Abelia, Dwarf	<i>Abelia X grandiflora</i>	Nana
Ajuga	<i>Ajuga reptans</i> <i>Ajuga genevensis</i>	Bronze Bronze Beauty
Almond, Flowering	<i>Prunus glandulosa</i>	
Apple*	<i>Malus pumila</i>	
Arborvitae	<i>Thuja occidentalis</i>	Nigra Pyramidalis Smaragh Techny Woodwardii
Arborvitae, Golden	<i>Thuja orientalis</i>	

Aster, Chinese	<i>Callistephus chinensis</i>	Dwarf Queen
Ash, Green	<i>Fraxinus pennsylvanica</i>	
Ash, Mountain	<i>Sorbus aucuparia</i>	
Ash, Purple	<i>Fraxinus americana</i>	
Azalea	<i>Rhododendron spp.</i>	Brilliant Buccaneer Carror Chimes (Belgian) Exbury Fashion Hardijzer Beauty Hershey Red Higasa Hinocrimson Holland (Hybrid) Marion Lee Northern Lights Orange Cup Orchid Lights Snow Southern Charm
Azalea, Flame	<i>Rhododendron calendulaceum</i>	
Azalea, Kirishima		
Bamboo, Heavenly		
Barberry	<i>Berberis thunbergii</i>	Aurea Dwarf Pigmy Green Kobold Pygmy Red Rose Glow
Barberry, Purple		Atropurpurea
Bearberry (common)	<i>Arctostaphylos uva-ursi</i>	Massachusetts
Birch, River	<i>Betula nigra</i>	
Blueberry*	<i>Vaccinium spp.</i>	Bluecrop Blue Jay Jersey North Blue Northland
Bottlebrush	<i>Callistemon citrinus</i>	
Boxwood, Japanese		Japonica
Boxwood, Weller	<i>Buxus sempervirens</i>	
Broom	<i>Cytisus spp.</i>	Moonlight
Broom	<i>Genista pilosa</i>	Vancouver Gold
Bugle Carpet		
Carex, Variegated	<i>Carex</i>	
Camellia	<i>Camellia japonica</i>  <i>Camellia sasangua</i>	Debutante Mathotiana Supreme Chansonette
Cedar, Red	<i>Juniperus virginiana</i>	
Cockscomb, Plumosa	<i>Celosia cristata</i>	Red Kewpie
Coleus	<i>Coleus blumei</i>	
Copper leaf	<i>Acalypha wilkesiana</i>	
Cotoneaster	<i>Cotonester apiculatus</i>	
Cycads	<i>Cycads revoluta</i>	
Coyotebrush	<i>Baccharis pelularis</i>	
Cypress, Bald	<i>Taxodium distichum</i>	
Cypress, Italian	<i>Cupressus sempervirens</i>	Glauca
Cypress, Leyland	<i>Cupressocyparis leylandii</i>	



Honeysuckle	<i>Lonicera japonica</i>	Clavey's Dwarf Halliana Tatarian Canadian White Zebelli Red Hosta
Hosta	<i>Hosta spp.</i> <i>Hosta lancifolia</i>	Albo Marginata
Ice Plant	<i>Carpobrotus edulis</i>	
Impatiens	<i>Impatiens wallerana</i>	
Iris	<i>Iris spp</i>	Wedgewood Dwarf Blue
Ivy, English	<i>Hedera helix</i>	Bulgaria Thornidale
Jasmine, Asian	<i>Trachelopermum asiaticum</i>	
Juniper	<i>Juniperus spp.</i>	Arcadia Armstrong Bar Harbor
	<i>Juniperus horizontalis</i>	Blue Chip Blue Pacific Blue Rug
	<i>Juniperus horizontalis</i>	Blue Star Broadmoor Buffalo Calgary Carpet Emerald Sea Emerald Spreader Endora Compacta Fruitlandi Green Gold Tip Hetzi Hughes Manhattan Blue Parsoni Pfizeriana Plumosa Prince of Wales Procumbens Dwarf San Jose Sargent Blue Sargent Green Scandia Scopulorum Moonglow Scopulorum Skyrocket Spartan
	<i>Juniperus chinensis</i>	Tamariscifolia
	<i>Juniperus sabina</i>	Weberi Youngstown Yukon Belle
King Palm	<i>Archontophoenix cunninghamiana</i>	
Laurel, Australian	<i>Pittosporum tobira</i>	
Laurel, Mountain	<i>Kalmia latifolia</i>	
Leucothoe	<i>Leucothoe fontanesiana</i>	
Lily, Africian	<i>Agapanthus africanus</i>	Albus Peter Pan
Lily, Africian Blue		
Lily of the Valley	<i>Pieris japonica</i>	Mt. Fire
Lilyturf	<i>Liriope muscari</i>	Evergreen Giant Lilac Beauty Majestic Monroe White Variegata

Ligustrum, Japanese	<i>Ligustrum japonicum</i>	
Liriope, Green	<i>Liriope spicata</i>	
Maple, Japanese	<i>Acer japonicum</i>	
Maple, Norway	<i>Acer platanoides</i>	
Maple, Red	<i>Acer rubrum</i>	
Maple, Silver	<i>Acer saccharinum</i>	
Maple Sugar	<i>Acer saccharum</i>	
Marigold	<i>Tagetes patula</i>	Honeycomb Wheeler's Dwarf Variegata
Mock Orange*	<i>Philadelphus spp</i>	Golden Snowflake Double White
Mopondo Grass	<i>Ophiopogon japonicus</i>	
Moss Rose	<i>Portulaca grandiflora</i>	Sunnyside
Myrtle, Crape	<i>Lagerstoemia indica</i>	Faurei Langer Muskogee Standard Pink
Myrtle, Wax	<i>Myrica cerifer</i>	
Nadina	<i>Nadina domestica</i>	Compacta Nana
Oleander	<i>Nerium oleander</i>	Hardy Red Petite Pink Sister Agnes
Oak, Laurel	<i>Quercus laurifolia</i>	
Oak, Pin	<i>Quercus palustris</i>	
Oak, Red	<i>Quercus rubra</i>	
Oak, Southern L.	<i>Quercus virginiana</i>	
Oak, Willow	<i>Quercus phellos</i>	
Oteospermum	<i>Osteospermum fruticosum</i>	Wirtligig
Palm, Bangalow		
Pampas Grass	<i>Cortadaria selloana</i>	
Paper Flower	<i>Bougainvillea glabra</i>	Barbara Karst
Pachysandra	<i>Pachysandra terminalis</i>	
Peach*	<i>Prunus persica</i>	
Periwinkle, Dwarf	<i>Vinca minor</i>	
Petunia	<i>Petunia X hybrida</i>	Picoti
Photinia, Red Tip	<i>Photinia X fraseri</i>	
Pieris	<i>Pieris japonica</i>	
Pine, Australian	<i>Pinus nigra</i>	
Pine, Japanese Black	<i>Pinus thumbergiana</i>	
Pine, Loblolly	<i>Pinus taeda</i>	
Pine, Longleaf	<i>Pinus palustris</i>	
Pine, Mugho	<i>Pinus mugho</i>	
Pine, Scotch	<i>Pinus sylvestris</i>	
Pine, Slash	<i>Pinus elliotii</i>	
Pine, Swiss Mt.	<i>Pinus mugo</i>	
Pine, Virginia	<i>Pinus virginiana</i>	
Pine, White	<i>Pinus strobus</i>	
Pineapple, Guava	<i>Feijoa fellowaiana</i>	
Pittosporum, Japan		
Potentilla	<i>Potentilla fruticosa</i>	Abbotswood
Privet	<i>Ligustrum japonicum</i>	Golden Vicary Regal Texanum Yellow Tipped Wax

Privet, Glossy	<i>Ligustrum lucidum</i>	
Pyracantha	<i>Pyracantha koidzumii</i>	Gnome Lalandei Victory
Queen Palm	<i>Arecastrum rammanzoffianum</i>	
Quince, Japanese*		
Rhododendron	<i>Rhododendron spp</i>	Album Cunningham White Fashion Hardy PJM Purple Gem Silvery Pink
Rhododendron, Carolina	<i>Rhododendron carolinianum</i>	
Rhododendron, Catawba	<i>Rhododendron catawbiense</i>	
Rodie Max (Rosebay)	<i>Rhododendron maximum</i>	
Rose	<i>Rosa banksiaae</i>	Luta
Rosemary*	<i>Rosmarinus officinalis</i>	
Rosemary, Bog	<i>Andromeda polifolia</i>	Nana
Salvia	<i>Salvia farinacea</i>	Rhea
Sedum	<i>Sedum spurium</i>	Dragon Blood Red Red Carpet Yellow
Spiraea	<i>Astilbe X arendsii</i>	Fanali
Spiraea	<i>Spiraea spp.</i>	Anthony Waterer Red Dolchica Froebeli Pink Goldenflame Red Snowmound White Van Houtte White
Spiraea, Garland	<i>Spiraea spp.</i>	
Spruce, Black Hills	<i>Picea glauca</i>	
Spruce, Colorado Blue	<i>Picea pungens</i>	
Spruce, Norway	<i>Picea abies</i>	
Spruce, White	<i>Picea glauca</i>	Conica
Sourwood	<i>Oxydendrum arboreum</i>	
Sweetflag, Grassyy-Le		
Sweetgum	<i>Liquidambar styraciflua</i>	
Sycamore	<i>Platanus occidentalis</i>	
Tree Fern (Tiki Fern)	<i>Asparagus virgatus</i>	
Trumpet Flower, Evening	<i>Gelsemium sempervirens</i>	
Tulip	<i>Tulip, spp</i>	Apeldoorn
Verbana, Shrub	<i>Lantana sellowiana</i>	
Vervain	<i>Verbena spp.</i>	St. Paul
Viburnum	<i>Viburnum spp.</i>	American Cranberry Bush Arrowood Common Snowball European Cranberry Bush Linden Mohican Wright
Windmill Palm	<i>Trachycarpus fortunei</i>	
Xylosma	<i>Xylosma congestum</i>	
Yaupon	<i>Ilex vomitoria</i>	Dwarf
Yew	<i>Taxus cuspidatra</i> <i>Taxus X media</i>	Denisiformis

\*Ornamental species only: DO NOT USE ON FOOD PRODUCING TREES AND ORNAMENTALS

## WEEDS CONTROLLED

Used as directed, DIMENSION 2 F.G. Turf and Ornamental Herbicide will control or suppress the following annual grass and broadleaf weeds when applied prior to their emergence. This product will not control established grasses, except for crabgrass in early stages of development, and broadleaf weeds, therefore, the area to be treated should be free of weeds prior to application.

## GRASSES

barley  
*Hordeum* spp.  
barnyardgrass  
*Echinochloa crus-galli*  
bluegrass, annual  
*Poa annua*  
brome  
*Bromus* spp.  
crabgrass, large  
*Digitaria sanguinalis*  
crabgrass, smooth  
*Digitaria ischaemum*  
crabgrass, Southern  
*Digitaria ciliaris*  
crow-footgrass  
*Dactyloctenium aegyptium*  
dallisgrass (seedling)  
*Paspalum dilatatum*  
goosegrass  
*Eleusine indica*  
foxtail, green  
*Setaria verti*  
foxtail, yellow  
*Setaria faberi*  
kikuyugrass  
*Pennisetum clandestinum*  
oats, wild  
*Avena fatua*  
ryegrass (annual & perennial)  
*Lolium* spp.  
smutgrass  
*Sporobolus poireti*

## BROADLEAF WEEDS

bittercress  
*Cardamine* spp.  
carpetweed  
*Mollugo verticillata*  
chickweed  
*Stellaria* spp.  
geranium, Carolina  
*Geranium carolinianum*  
henbit  
*Lamium* spp.  
knotweed, prostrate  
*Polygonum saviculare*  
lespedeza, common  
*Lespedeza striata*  
marestail  
*Hippuris vulgaris*  
medic. black  
*Medicago lupulina*  
mustard  
*Brassica* spp.  
oxalis, buttercup  
*Oxalis pes-caprae*  
pineappleweed  
*Matricaria matricarioides*  
pigweed, redroot  
*Amaranthus retroflexus*  
parsley-piert  
*Alchemilla arvensis*  
purslane, common  
*Portulaca oleracea*  
rocket, London  
*Sisymbrium irio*  
shepherdspurse  
*Capsella bursa-pastoris*  
speedwell, corn  
*Veronica arvensis*  
spurge, garden  
*Euphorbia hirta*  
spurge, prostrate  
*Euphorbia humistrata*  
spurge, spotted  
*Euphorbia maculata*  
woodsorrel, creeping  
*Oxalis corniculata*  
woodsorrel, yellow  
*Oxalis stricta*

**APPLICATION EQUIPMENT AND INSTRUCTIONS**

Apply this product with drop or rotary-type spreaders designed to apply granular herbicides. Avoid the use of spreaders that would apply this product in narrow rows or concentrated bands. Before each application, calibrate the spreader according to the equipment manufacturer's directions for adjusting the spreader settings such that the spreader delivers the appropriate application rate recommended above. Apply this product uniformly over the area to be treated. 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. Avoid streaking, skips, or overlaps during application. Check equipment frequently to ensure equipment is functioning properly and applying uniform distribution of granules.

**DIMENSION®** is a registered trademark of Rohm and Haas Company.

ROHM AND HAAS COMPANY  
100 INDEPENDENCE MALL WEST  
PHILADELPHIA, PA. 19106-2399  
(215) 592-3000

MADE IN USA

-M1  
5/14/97  
JD/rdm



®

**CRAB-BUSTER 2 F.G.**  
LAWN and ORNAMENTAL HERBICIDE



Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

~~Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.  
Not for use on plants intended for aesthetic purposes or climatic modification and being grown in interior landscapes, ornamental gardens or parks, or on golf courses or lawns and grounds.~~

*In New York State this product may only be used by professional applicators at no more than 24 pounds (0.5 pounds active ingredient) per year and is prohibited from use in Nassau and Suffolk Counties.*

**ACTIVE INGREDIENTS**

Dithiopyr, 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-S,S-dimethylester.....2.1%

INERT INGREDIENT.....97.9%

TOTAL 100.0%  
**ACCEPTED with COMMENTS**  
**In EPA Letter Dated**

Product protected by U.S. Patent No. 4,692,184. Other patents pending.

EPA Reg. No. 707-247

Read the entire label before using this product.  
Use only according to label instructions.

**MAY 29 1997**  
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 707-247

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

**FIRST AID:** IF IN EYES- Immediately flush with plenty of water. Get medical attention if irritation persists.  
IF INHALED- Remove individual to fresh air. Seek medical attention if breathing difficulty develops.

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

**CAUTION!**  
**CAUSES EYE IRRITATION.**  
**HARMFUL IF INHALED.**  
Avoid contact with eyes or clothing.  
Avoid breathing dust.  
Wash thoroughly with soap and water after handling.  
Remove contaminated clothing and wash before reuse.  
Prolonged or frequently repeated skin contact while handling this material may cause allergic reaction in some individuals.

**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.

**DIRECTIONS FOR USE**

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

**CONDITIONS OF SALE AND WARRANTY**

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. **ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.** Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. **IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.**

**Storage and Disposal**

**STORAGE:** Store this product only in its original container in a dry, cool, secured storage area. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

**PRODUCT DISPOSAL:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

**EMPTY CONTAINER DISPOSAL:** Do not reuse bag. Completely empty bag into application equipment. Dispose of emptied bag(s) in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**SPILL:** In case of spill, sweep up material and dispose of material according to "product disposal" directions listed above.

**Guaranteed Fertilizer Analysis: XX-XX-XX**

Water-Insoluble Nitrogen .....	xx%
Total Nitrogen (N) .....	xx%
Ammoniacal Nitrogen .....	xx%
Urea Nitrogen*** .....	xx%
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> ) .....	xx%
Soluble Potash (K <sub>2</sub> O) .....	xx%
Magnesium (Mg) .....	xx%
Iron (Fe) .....	xx%
Manganese (Mn) .....	xx%

Nutrient Sources: Sulfur Coated Urea, Urea, Methylene Urea, Ammonium Phosphate, Ammonium Sulfate, Diammonium Phosphate, Sulfate of Potash, Ferrous Sulphate, Manganese Oxide, Magnesium Oxide, Dolomite.

Chlorine (Cl), not more than 9%.

\*\*\* 7% Slowly Available Urea Nitrogen from Sulfur Coated Urea.

- A Selective Herbicide Plus Fertilizer Combination Product that Provides Control of Crabgrass and Other Weeds in Established Lawns and Ornamental Turfgrasses and Residential Landscapes.
- **Premium Granular Fertilizer** - Providing the Nutrients Needed for Beautiful Healthy Lawn and Ornamentals.
- Contains **CRAB-BUSTER® 2F.G.** Herbicide - A Highly Effective Herbicide for Crabgrass Control! **NON-STAINING!**
- Can Be Applied **Up to 4 Weeks Later** Than Other Preemergence Crabgrass Preventers.

This Bag Treats Up To \_\_\_\_\_ Square Feet

**GENERAL INFORMATION FOR TURF USE**

**CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide is a premium quality combination product that provides both weed control and the required nutrients for optimum turfgrass growth all in a single product.

**CRAB-BUSTER 2 F.G.** contains new CRAB-BUSTER herbicide, a selective herbicide that can be applied up to 4 weeks later than other crabgrass preventers and provide up to 4 months control of crabgrass and other grass and broadleaf weeds, prior to their germination in lawns and ornamental turfgrasses. This product should be applied to lawns and ornamental turfgrasses that are well established (See "Use Precautions" section below for a list of the tolerant turfgrasses). This product will not harm nearby established ornamentals when used according to directions, given below.

**USE PRECAUTIONS**

**CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide should only be applied to lawns and ornamental turfgrasses that are well established. Use of this product on lawns and ornamental turfgrasses that are not well established, or have been weakened by stress due to mechanical operations, pests, excessive temperatures, or lack of moisture may increase the chances for turfgrass injury. Do not apply to lawns or turfgrasses that are under stress.

<b>CRAB-BUSTER 2 F.G.</b>	
can be applied to the following turfgrasses when used as directed:	
<u>Cool-Season Turfgrasses</u>	<u>Warm-Season Turfgrasses</u>
<ul style="list-style-type: none"> <li>• Creeping Bentgrass</li> <li>• Fine Fescues</li> <li>• Kentucky Bluegrass</li> <li>• Perennial Ryegrass</li> <li>• Tall Fescues</li> </ul>	<ul style="list-style-type: none"> <li>• Bahiagrass</li> <li>• Bermudagrass</li> <li>• Buffalograss</li> <li>• Carpetgrass</li> <li>• Centipedegrass</li> <li>• St. Augustinegrass</li> <li>• Zoysiagrass</li> </ul>

**CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide should be applied in the spring or fall prior to the weed seed germination in established lawns and ornamental turfgrasses.

**CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide can be applied up to 4 weeks later than other crabgrass preventers and still provide season-long weed control. This is due to the dithiopyr herbicide component of this combination product. CRAB-BUSTER 2 F.G. provides both preemergence control of crabgrass and other weeds when applied prior to their germination, and it also provides postemergence control of seedling crabgrass. The postemergence control provided by CRAB-BUSTER-2 F.G. is limited to crabgrass only and will provide control up to 4 weeks after crabgrass germination. Do not make an application of this product later than 4 weeks after crabgrass germination.

For control of other grass and broadleaf weeds, this product must be applied as a preventative treatment before their emergence. Only crabgrass will be controlled with applications made up to 4 weeks after germination. Do not expect control with applications made later than 4 weeks after crabgrass germination.

Improved Weed Control may occur when this product is applied within a few days after mowing and further mowing is delayed until the turfgrass has been watered or received rainfall to dissolve the fertilizer granules.

**Reseeding, Overseeding, or Sprigging** of turfgrasses into areas that have been previously treated with this product should be delayed until 16 weeks after application. Reseeding, overseeding, or sprigging within 16 weeks or earlier after application may injure or prevent the establishment of the newly reseeded, overseeded or sprigged turfgrasses.

•DO NOT apply more than 0.55 lbs. of this product per 1,000 sq. ft. per application and no more than 1.65 lbs.(0.55 lbs in New York) of this product /1000 sq. ft. per year (1,000 square feet area = 100 feet x 10 feet).

•DO NOT use clippings from treated turf for mulching around flowers, vegetables or fruit trees.

•Keep people and pets off treated areas until dust has settled.

**APPLICATION DIRECTIONS**

**CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide will provide control of crabgrass and other grass and broadleaf weeds when applied prior to germination in established lawns and ornamental turfgrasses.

Weeds Controlled and/or Suppressed by  
**CRAB-BUSTER 2 F.G.**

Grass Weeds:

- Annual Bluegrass
- Annual Ryegrass
- Barnyardgrass
- Crabgrass
- Crowfootgrass
- Goosegrass
- Green Foxtail
- Kikuyugrass (seedling)
- Perennial Ryegrass
- Smutgrass (seedling)
- Yellow Foxtail

Broadleaf Weeds:

- Bittercress
- Buttercup Oxalis
- Carolina Geranium
- Chickweed
- Common Lespedeza
- Common Purslane
- Corn Speedwell
- Creeping Oxalis
- Henbit
- Parsley-piert
- Pineappleweed
- Prostrate Spurge
- Spotted Spurge
- Yellow Woodsorrel

**APPLICATION TIMING**

) **CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide may be applied either in the spring or in the fall for the control of weeds.

When this product is applied in the fall, a sequential or second application must be made the following spring to provide season-long control of weeds.

If this product is applied in the fall, DO NOT reseed, overseed or sprig turfgrasses within 16 weeks after application of this product due to potential turfgrass injury to the newly reseeded, overseeded or sprigged turfgrasses.

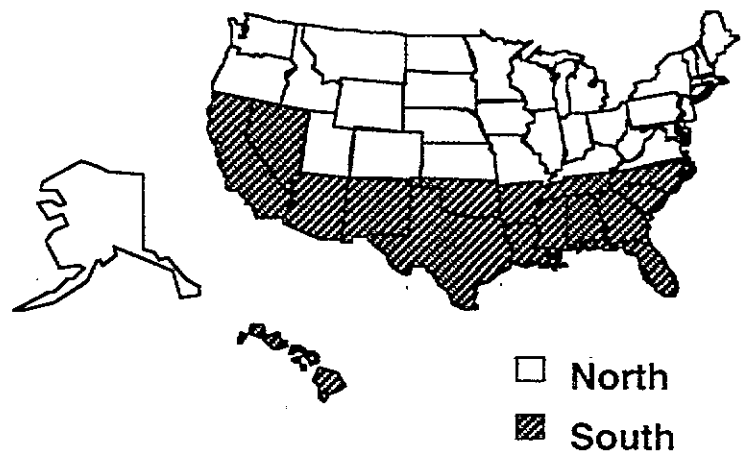
Length of Control:

**CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide will provide up to 4 months of weed control if applied according to label directions.

The actual length of control will vary depending on use rate, weather conditions, condition of the turfgrass, intensity of weed pressure, and the location or "Region" within the United States that this product is being applied.

Please check the map below to determine the region of the U.S. that applies to your particular use area, and find the number of pounds of this product needed in your area based on the length of weed controlled outlined in the tables below.

Use "Regions" within the United States:



**RECOMMENDED USE RATES**

Recommended Use Rate Table  
for CRAB-BUSTER 2 F.G.

(Pounds of this product to apply per 1,000 square feet of turfgrass)

Region of U.S.	Length of Weed Control <u>2-3</u> Months Control	Length of Weed Control <u>3-4</u> Months Control
North	0.14	0.19
South	0.21	0.28

Area Covered at Recommended Use Rate Table  
for 2 to 3 Months of Weed Control

Size of Lawn to Treat (Square Feet)	Total Amount of Product to Apply	
	North (Pounds of This Product to Apply)	South
1,000	0.14	0.21
2,000	0.28	0.43
3,000	0.42	0.64
4,000	0.56	0.86
5,000	0.70	1.07
6,000	0.84	1.29
7,000	0.98	1.50

Area Covered at Recommended Use Rate Table  
for 3 to 4 Months of Weed Control

Size of Lawn to Treat (Square Feet)	Total Amount of Product to Apply	
	North (Pounds of This Product to Apply)	South
1,000	0.19	0.28
2,000	0.38	0.55
3,000	0.57	0.83
4,000	0.76	1.10
5,000	0.95	1.38
6,000	1.14	1.65
7,000	1.33	1.93

## APPLICATION EQUIPMENT AND INSTRUCTIONS

**CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide can be applied with a drop or rotary type spreader designed to apply granular fertilizers.

For best results, apply this product evenly and uniformly over the turfgrass area avoiding streaking, skips or overlaps. Avoid the use of spreaders that would apply this product in narrow rows or concentrated bands.

Before each application, calibrate the spreader according to the equipment manufacturer's directions. Adjust the spreader settings such that the spreader delivers the appropriate application rates of this product as recommended above.

A more uniform application can be made by spreading one-half of the recommended amount of this product over the turfgrass area and then applying the remaining one-half of this product at a right angle to the previous application direction.

Check application equipment frequently to insure equipment is functioning properly and applying a uniform distribution of fertilizer.

**GENERAL INFORMATION -LANDSCAPE ORNAMENTALS**

**CRAB-BUSTER 2 F.G** Lawn and Ornamental Herbicide provides preemergence control of listed annual grass and broadleaf weeds in landscape ornamentals. It is intended for use on plants grown for aesthetic purposes in residential landscapes. Ornamental plants on this label have shown excellent tolerance to CRAB-BUSTER 2 F.G. when applied as directed. It is impossible, however, to evaluate tolerance to this product on all ornamental plant species or varieties or under all possible growing conditions. Until familiar with the performance, under user growing conditions, a limited number of plants should be treated for tolerance evaluation prior to initiating large-scale applications. The user should always exercise reasonable judgement and caution with this product.

**USE RATES**

Apply **CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide with a properly calibrated spreader which will assure accurate, even particle distribution. This product may be applied as a single application or as a split application prior to weed seed germination.

Refer to the following table for product recommendations when treating a small area.

**DO NOT** apply more than 0.55 lbs. of this product/1000 sq. ft. per application, and no more than 1.65 lbs.(0.55 lbs. in New York) of this product/1000 sq. ft. per year.

Pounds Product/Acre	Pounds Product/1000 Square Feet	Ounces Product/100 Square Feet
24	0.55	0.88 (25 grams)

**APPLICATION TIMING AND RECOMMENDATIONS**

**CRAB-BUSTER 2 F.G.** Lawn and Ornamental Herbicide is a preemergence herbicide that will not control established weeds. Make applications prior to weed seed germination or to bare ground. The best weed control is obtained when applied to soil that is free of clods, weeds and debris such as leaves. Prior to making an application, control existing vegetation by hand weeding, cultivation or with a postemergence herbicide. Once an application of this product has been made, do not disturb the soil surface as the herbicide barrier will be broken.

**PRECAUTIONS**

- Only apply this product to established ornamentals.
- Do not apply this product directly to bare root of ornamental plants as injury may result.
- Do not incorporate this product into soil. Dilution of active ingredient and possible injury to plant roots may occur.
- Do not apply to plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, wind injury, hail, frost damage, winter injury, injury from previously applied pesticides or injury due to insects, nematods or disease.
- To avoid foliar damage to ornamentals, irrigate immediately after application to remove herbicide particles from the foliage.
- Do not apply under conditions which might affect product distribution. Wind could affect distribution and move product onto sensitive species. Uneven product distribution will result in uneven weed control.
- Do not apply this product on grasses grown for seed.
- Do not graze livestock or feed forage cut from areas treated with this product.

**TOLERANT ORNAMENTALS**

When applied as directed under the conditions described, this product has shown acceptable tolerance on the following ornamental species. However, this product has not been tested on all cultivars of each species or under all possible growing conditions. The user should always exercise reasonable judgment and caution when using this product.

Common Name	Botanical Name	Tolerant Cultivars
Abelia, Dwarf	<i>Abelia X grandiflora</i>	Nana
Ajuga	<i>Ajuga reptans</i> <i>Ajunga genevensis</i>	Bronze Bronze Beauty
Almond, Flowering	<i>Prunus glandulosa</i>	
Apple*	<i>Malus pumila</i>	
Arborvitae	<i>Thuja occidentalis</i>	Nigra Pyramidalis Smaragh Techny Woodwardii
Arborvitae, Golden	<i>Thuja orientalis</i>	
Aster, Chinese	<i>Callistephus chinensis</i>	Dwarf Queen
Ash, Green	<i>Fraxinus pennsylvanica</i>	
Ash, Mountain	<i>Sorbus aucuparia</i>	

Ash, Purple	<i>Fraxinus americana</i>	
Azalea	<i>Rhododendron spp.</i>	Brilliant Buccaneer Carror Chimes (Belgian) Exbury Fashion Hardijzer Beauty Hershey Red Higasa Hinocrimson Holland (Hybrid) Marion Lee Northern Lights Orange Cup Orchid Lights Snow Southern Charm
Azalea, Flame	<i>Rhododendron calendulaceum</i>	
Azalea, Kirishima		
Bamboo, Heavenly		
Barberry	<i>Berberis thunbergii</i>	Aurea Dwarf Pigmy Green Kobold Pygmy Red Rose Glow
Barberry, Purple		Atropurpurea
Bearberry (common)	<i>Arctostaphylos uva-ursi</i>	Massachusetts
Birch, River	<i>Betula nigra</i>	
Blueberry*	<i>Vaccinium spp.</i>	Bluecrop Blue Jay Jersey North Blue Northland
Bottlebrush	<i>Callistemon citrinus</i>	
Boxwood, Japanese		Japonica
Boxwood, Weller	<i>Buxus sempervirens</i>	
Broom	<i>Cytisus spp.</i>	Moonlight
Broom	<i>Genista pilosa</i>	Vancouver Gold
Bugle Carpet		
Carex, Variegated	<i>Carex</i>	
Camellia	<i>Camellia japonica</i>  <i>Camellia sasangua</i>	Debutante Mathotiana Supreme Chansonette
Cedar, Red	<i>Juniperus virginiana</i>	
Cockscomb, Plumosa	<i>Celosia cristata</i>	Red Kewpie
Coleus	<i>Coleus blumei</i>	
Copper leaf	<i>Acalypha wilkesiana</i>	
Cotoneaster	<i>Cotoneaster apiculatus</i>	
Cycads	<i>Cycads revoluta</i>	
Coyotebrush	<i>Baccharis pelularis</i>	
Cypress, Bald	<i>Taxodium distichum</i>	
Cypress, Italian	<i>Cupressus sempervirens</i>	Glauca
Cypress, Leyland	<i>Cupressocyparis leylandii</i>	
Cypress, Japanese False	<i>Chamaecyparis obtusa</i>	Gracilis
Daffodil	<i>Narcissus spp.</i>	King Alfred
Daylilly	<i>Hemerocallis spp.</i>	Aztec Gold Bright Yellow (Hybrid)



		Single Gold (Evergreen) Wilson's Yellow
Dogwood	<i>Cornus florida</i>	
Dogwood, American	<i>Cornus sericea</i>	Flavimarica
Douglas Fir	<i>Pseudotsuga menziesii</i>	
Dusty Miller	<i>Senecio cineraria</i>	
Elm, Drake	<i>Ulmus parvifolia</i>	
Euonymus	<i>Euonymus fortunei</i>	Argenteo-variegata Aureo-marginata Colorata Emerald Gaiety Emerald 'N Gold Gold Edge Gold Princess Silver King Tricolor Vegetus
Fan Palm, European	<i>Chamaerops humilis</i>	
Fan Palm, Mexican	<i>Washingtonia robusta</i>	
Fescue	<i>Festuca glauca</i>	
Fetterbush	<i>Leucothoe fontiana</i>	Rainbow
Ficus	<i>Ficus retusa</i>	Nitidia
Forsythia	<i>Forsythia X intermedia</i>  <i>Spring Glory</i>	Arnold Dwarf Bronxensis Dwarf Lynwood Gold Meadowlark Weeping
Fir Fraser	<i>Abies fraseri</i>	
Gardenia	<i>Gardenia jasminoides</i>	Mystery Radicans
Geranium	<i>Pelargonium X hortorum</i>	
Gum	<i>Eucalyptus citriodora</i>	
Hawthorn	<i>Crataegus spp.</i>	Cockspur White Crimson Cloud Enchantress Jack Evans Washington White
Heather, Twisted	<i>Erica cinerea</i>	Mediterranean Pink
Hibiscus	<i>Hibiscus spp.</i>	Brilliant Hula Girl Blue Bird
Hemlock, Canada	<i>Tsuga canadensis</i>	
Holly	<i>Ilex spp.</i>  <i>Ilex X meserveae</i>          <i>Ilex X attenuata</i>	Blue Boy Blue Girl Burfodii China Girl Compacta Forsteri Hellerie Japanese Northern Beauty Needlepoint Nellie R. Stevens Savanah
Holly, Chinese	<i>Ilex cornuta</i>	
Holly, Japanese	<i>Ilex crenata</i>	
Holly, Yaupon	<i>Ilex vomitoria</i>	
Honeysuckle	<i>Lonicera japonica</i>	Clavey's Dwarf Halliana Tatarian Canadian White Zebelli Red Hosta

Hosta	<i>Hosta spp.</i> <i>Hosta lancifolia</i>	Albo Marginata
Ice Plant	<i>Carpobrotus edulis</i>	
Impatiens	<i>Impatiens wallerana</i>	
Iris	<i>Iris spp</i>	Wedgewood Dwarf Blue
Ivy, English	<i>Hedera helix</i>	Bulgaria Thorndale
Jasmine, Asian	<i>Trachelopermum asiaticum</i>	
Juniper	<i>Juniperus spp.</i>	Arcadia Armstrong Bar Harbor
	<i>Juniperus horizontalis</i>	Blue Chip Blue Pacific Blue Rug
	<i>Juniperus horizontalis</i>	Blue Star Broadmoor Buffalo Calgary Carpet Emerald Sea Emerald Spreader Endora Compacta Fruitlandi Green Gold Tip Hetzi Hughes Manhattan Blue Parsoni Pfitzeriana Plumosa Prince of Wales Procumbens Dwarf San Jose Sargent Blue Sargent Green Scandia Scopulorum Moonglow Scopulorum Skyrocket Spartan
	<i>Juniperus chinensis</i>	Tamariscifolia
	<i>Juniperus sabina</i>	Weberi Youngstown Yukon Belle
King Palm	<i>Archontophoenix cunninghamiana</i>	
Laurel, Australian	<i>Pittosporum tobira</i>	
Laurel, Mountain	<i>Kalmia latifolia</i>	
Leucothoe	<i>Leucothoe fontanesiana</i>	
Lily, Africian	<i>Agapanthus africanus</i>	Albus Peter Pan
Lily, Africian Blue		
Lily of the Valley	<i>Pieris japonica</i>	Mt. Fire
Lilyturf	<i>Liriope muscari</i>	Evergreen Giant Lilac Beauty Majestic Monroe White Variegata
Ligustrum, Japanese	<i>Ligustrum japonicum</i>	
Liriope, Green	<i>Liriope spicata</i>	

Maple, Japanese	<i>Acer japonicum</i>	
Maple, Norway	<i>Acer platanoides</i>	
Maple, Red	<i>Acer rubrum</i>	
Maple, Silver	<i>Acer saccharinum</i>	
Maple Sugar	<i>Acer saccharum</i>	
Marigold	<i>Tagetes patula</i>	Honeycomb Wheeler's Dwarf Variegata
Mock Orange*	<i>Philadelphus spp</i>	Golden Snowflake Double White
Mopndo Grass	<i>Ophiopogon japonicus</i>	
Moss Rose	<i>Portulaca grandiflora</i>	Sunnyside
Myrtle, Crape	<i>Lagerstoemia indica</i>	Faurei Langer Muskogee Standard Pink
Myrtle, Wax	<i>Myrica cerifer</i>	
Nadina	<i>Nadina domestica</i>	Compacta Nana
Oleander	<i>Nerium oleander</i>	Hardy Red Petite Pink Sister Agnes
Oak, Laurel	<i>Quercus laurifolia</i>	
Oak, Pin	<i>Quercus palustris</i>	
Oak, Red	<i>Quercus rubra</i>	
Oak, Southern L	<i>Quercus virginiana</i>	
Oak, Willow	<i>Quercus phellos</i>	
Oteospermum	<i>Osteospermum fruticosum</i>	Wirligig
Palm, Bangalow		
Pampas Grass	<i>Cortadaria selloana</i>	
Paper Flower	<i>Bougainvillea glabra</i>	Barbara Karst
Pachysandra	<i>Pachysandra terminalis</i>	
Peach*	<i>Prunus persica</i>	
Periwinkle, Dwarf	<i>Vinca minor</i>	
Petunia	<i>Petunia X hybrida</i>	Picoti
Photinia, Red Tip	<i>Photinia X fraseri</i>	
Pieris	<i>Pieris japonica</i>	
Pine, Australian	<i>Pinus nigra</i>	
Pine, Japanese Black	<i>Pinus thumbergiana</i>	
Pine, Loblolly	<i>Pinus teada</i>	
Pine, Longleaf	<i>Pinus palustris</i>	
Pine, Mugho	<i>Pinus mugho</i>	
Pine, Scotch	<i>Pinus sylvestris</i>	
Pine, Slash	<i>Pinus elliotii</i>	
Pine, Swiss Mt.	<i>Pinus mugo</i>	
Pine, Virginia	<i>Pinus virginiana</i>	
Pine, White	<i>Pinus strobus</i>	
Pineapple, Guava	<i>Feijoa fellowaiana</i>	
Pittosporum, Japan		
Potentilla	<i>Potentilla fruticosa</i>	Abbotswood
Privet	<i>Ligustrum japonicum</i>	Golden Vicary Regal Texanum Yellow Tipped Wax
Privet, Glossy	<i>Ligustrum lucidum</i>	
Pyracantha	<i>Pyracantha koidzumii</i>	Gnome Lalandei

		Victory
Queen Palm	<i>Arecastrum rammanzoffianum</i>	
Quince, Japanese*		
Rhododendron	<i>Rhododendron spp</i>	Album Cunningham White Fashion Hardy PJM Purple Gem Silvery Pink
Rhododendron, Carolina	<i>Rhododendron carolinianum</i>	
Rhododendron, Catawba	<i>Rhododendron catawbiense</i>	
Rodie Max (Rosebay)	<i>Rhododendron maximum</i>	
Rose	<i>Rosa banksiaae</i>	Luta
Rosemary*	<i>Rosmarinus officinalis</i>	
Rosemary, Bog	<i>Andromeda polifolia</i>	Nana
Salvia	<i>Salvia farinacea</i>	Rhea
Sedum	<i>Sedum spurium</i>	Dragon Blood Red Red Carpet Yellow
Spiraea	<i>Astilbe X arendsii</i>	Fanall
Spiraea	<i>Spiraea spp.</i>	Anthony Waterer Red Dolchica Froebeli Pink Goldenflame Red Snowmound White Van Houtte White
Spiraea, Garland	<i>Spiraea spp.</i>	
Spruce, Black Hills	<i>Picea glauca</i>	
Spruce, Colorado Blue	<i>Picea pungens</i>	
Spruce, Norway	<i>Picea abies</i>	
Spruce, White	<i>Picea glauca</i>	Conica
Sourwood	<i>Oxydendrum arboreum</i>	
Sweetflag, Grassyy-Le		
Sweetgum	<i>Liquidambar styraciflua</i>	
Sycamore	<i>Platanus occidentalis</i>	
Tree Fern (Tiki Fern)	<i>Asparagus virgatus</i>	
Trumpet Flower, Evening	<i>Gelsemium sempervirens</i>	
Tulip	<i>Tulip. spp</i>	Apeldoorn
Verbana, Shrub	<i>Lantana sellowiana</i>	
Vervain	<i>Verbena spp.</i>	St. Paul
Viburnum	<i>Viburnum spp.</i>	American Cranberry Bush Arrowood Common Snowball European Cranberry Bush Linden Mohican Wright
Windmill Palm	<i>Trachycarpus fortunei</i>	
Xylosma	<i>Xylosma congestum</i>	
Yaupon	<i>Ilex vomitoria</i>	Dwarf
Yew	<i>Taxus cuspidatra</i> <i>Taxus X media</i>	Denisiformis

\*Ornamental species only: DO NOT USE ON FOOD PRODUCING TREES OR ORNAMENTALS.

## WEEDS CONTROLLED

Used as directed, CRAB-BUSTER 2F.G. Lawn and Ornamental Herbicide will control or suppress the following annual grass and broadleaf weeds when applied prior to their emergence. This product will not control established grasses, except for crabgrass in early stages of development, and broadleaf weeds, therefore, the area to be treated should be free of weeds prior to application.

## GRASSES

barley  
*Hordeum* spp.  
barnyardgrass  
*Echinochloa crus-galli*  
bluegrass, annual  
*Poa annua*  
brome  
*Bromus* spp.  
crabgrass, large  
*Digitaria sanguinalis*  
crabgrass, smooth  
*Digitaria ischaemum*  
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 (annual & perennial)  
*Lolium* spp.  
smutgrass  
*Sporobolus poireti*

## BROADLEAF WEEDS

bittercress  
*Cardamine* spp.  
carpetweed  
*Mollugo verticillata*  
chickweed  
*Stellaria* spp.  
geranium, Carolina  
*Geranium carolinianum*  
henbit  
*Lamium* spp.  
knotweed, prostrate  
*Polygonum saviculare*  
lespedeza, common  
*Lespedeza striata*  
marestail  
*Hippuris vulgaris*  
medic, black  
*Medicago lupulina*  
mustard  
*Brassica* spp.  
oxalis, buttercup  
*Oxalis pes-caprae*  
pineappleweed  
*Matricaria matricarioides*  
pigweed, redroot  
*Amaranthus retroflexus*  
parsley-piert  
*Alchemilla arvensis*  
purslane, common  
*Portulaca oleracea*  
rocket, London  
*Sisymbrium irio*  
shepherdspurge  
*Capsella bursa-pastoris*  
speedwell, corn  
*Veronica arvensis*  
spurge, garden  
*Euphorbia hirta*  
spurge, prostrate  
*Euphorbia humistrata*  
spurge, spotted  
*Euphorbia maculata*  
woodsorrel, creeping  
*Oxalis corniculata*  
woodsorrel, yellow  
*Oxalis stricta*

**APPLICATION EQUIPMENT AND INSTRUCTIONS**

Apply this product with drop or rotary-type spreaders designed to apply granular herbicides. Avoid the use of spreaders that would apply this product in narrow rows or concentrated bands. Before each application, calibrate the spreader according to the equipment manufacturer's directions for adjusting the spreader settings such that the spreader delivers the appropriate application rate recommended above. Apply this product uniformly over the area to be treated. 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. Avoid streaking, skips, or overlaps during application. Check equipment frequently to ensure equipment is functioning properly and applying uniform distribution of granules.

**CRAB-BUSTER®** is a registered trademark of Rohm and Haas Company.

Manufactured By:  
Rohm and Haas Company  
100 Independence Mall West  
Philadelphia, Pennsylvania 19106-2399

MADE IN USA  
-M1  
5/14/97  
JD/rdm