

BEST DOCUMENT AVAILABLE

Net Weight	80%	BY WT.
Net Content	20%	
Total	100%	

#10163-06393  
CAUTION

KEEP OUT OF REACH OF CHILDREN

May Irritate Eyes, Nose, Throat, and Skin. Avoid Breathing Dust or Spray Mist. Avoid Contact with Skin, Eyes, and Clothing.

Important: Injury to or loss of desirable trees or other plants may result from failure to observe the following: Do not apply (except as recommended for crop use), or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on home plantings of trees, shrubs or herbaceous plants, nor on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of dry powder or spray to desirable plants. Do not contaminate any body of water. Keep from contact with fertilizers, insecticides, fungicides, and seeds.

Thoroughly clean all traces of Diuron from application equipment immediately after use. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately). Do Not Contaminate water by cleaning of equipment or disposal of wastes. Do Not Re-Use Container. When Empty, Bury Bag; Crush and Bury Drum.

NOTICE OF CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.

HOWARD COMPANY  
Agricultural Chemicals

ETA 807. 4101-14

ARIZONA  
P.O. Box 5696  
1400 W. 8th St.  
Tucson, Ariz. 85761  
Telephone: 736-4771

3

BEST DOCUMENT AVAILABLE

44-10163 6393

#### GENERAL INFORMATION

Profil Diuron weed killer is a low-toxicity powder which is mixed with water and applied as a spray for selective control of weeds in various crops and for non-selective weed control on non-cropland areas. It is non-corrosive to equipment, non-flammable and non-volatile.

Diuron may be applied to soil prior to emergence of weeds to control susceptibility in weed seedlings for an extended period of time; the degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall and other conditions. Soils high in clay or organic matter require higher dosages than soil low in clay or organic matter to obtain equivalent herbicide performance. Moisture is required to activate the chemical; best results occur if rainfall (or irrigation) occurs within 2 weeks of application.

Diuron may also be used to control emerged weeds. Results vary with rate applied and environmental conditions; best results are obtained on succulent weeds growing under conditions of high humidity and temperatures of 70°F or higher. Addition of a surfactant to the spray (where recommended) increases contact effects of Diuron.

Since the effect of Diuron varies with soils, uniformity of application, and environmental conditions, it is suggested that growers limit their first use to small areas. Observe all cautions and limitations on labeling of all products used in mixtures.

#### DIRECTIONS FOR USE

##### SELECTIVE USE IN CROPS

PRE-EMERGENCE USE (Germinating Weeds): Diuron, at rates of 5/4 to 1 lb. per acre, controls annual weeds such as barnyardgrass (watergrass), crabgrass, lamb'squarters, pigweed, purslane and ragweed; at rates of 1 1/2 to 2 lbs. per acre, it controls weeds such as Amsinckia (fiddleneck), annual bluegrass, annual groundcherry, annual morningglory, annual sweet vernalgrass, chickweed, corn spurry, dogfennel, foxtail, groundsel, knawel, pennycrests, rattail fescue, red sprangletop, shepherdspurse, tansymustard, velvetgrass, wild buckwheat, wild lettuce, and wild mustard. Rates of 2 to 6 lbs. per acre control weeds such as ageratum, annual lovegrass, annual ryegrass, annual smartweed, annual sowthistle, buttonweed, corn speedwell, dayflower, Florida's paintbrush, hawk-beard, horseweed, kochia, kyllinga, marigold, Mexican clover, orchardgrass, peppergrass, pineappleweed, pokeweed, rabbit tobacco, ricegrass, sandbur, seedling Johnsongrass, spindleshedded, and wild radish.

Partial control of the following weeds usually occurs at rates: 1 to 1 1/2 lbs. per acre, annual morningglory, celosia, prickly sida (tree-weed), solomon and ticklepod; 4 lbs. per acre, quackgrass and barnbettle; 8 to 10 lbs. per acre, wintergrass, hardpan and pangolgrass.

BEST DOCUMENT AVAILABLE

#10163-5  
6393

USE (Emergent Weeds): Diuron at recommended rates, controls annual weeds such as annual morningglory, barnyardgrass (watergrass), crabgrass, crowfoot, goosegrass, pigweed and purslane. Addition of a surfactant to the spray (where recommended) increases contact effects of Diuron. Best results are obtained on succulent weeds growing under conditions of high humidity and temperatures of 70° F. or higher.

EQUIPMENT -- Spray Volumes and Pressure: Use a tractor-mounted fixed-boom power sprayer properly calibrated to a constant speed and rate of delivery. Openings in screens should be equal to or larger than 50 mesh. Continuous agitation in the spray tank is required to keep the material in suspension. Agitate by mechanical or hydraulic means; if by-pass or return line is used, it should terminate at bottom of tank to minimize foaming. Avoid overlapping, and shut off spray booms while starting, turning, slowing or stopping, or injury to the crop may result.

For pre-emergence application, use 25 to 40 gals. per acre and spray pressure of 50 to 40 psi. For post-emergence application, use sufficient volume (min. 25 gals. per acre) for thorough coverage of weed foliage; use spray pressure of 20 to 25 psi to keep spray drift to a minimum.

AERIAL: For alfalfa, asparagus, barley (winter), cotton (preplant or pre-emergence only), grass seed crops, pineapple, sugarcane and wheat (winter), application may be made by aircraft (5 to 10 gals. per acre); avoid overlapping of spray swath and avoid application under conditions where excessive drift may occur. Where land is bedded, make application parallel to rows.

SPRAY PREPARATION: Mix proper amount of Diuron into necessary volume of water; where use of a surfactant is recommended, dilute with 10 parts of water and add as last ingredient to nearly full tank.

USE RATES: All dosages of Diuron are expressed as broadcast rates; for band treatment, use proportionately less. For example, use 1/5 of the broadcast rate when treating a 14" band where row spacing is 42". Where a range of dosages is given, use the lower rate on lighter soils (low in clay or organic matter) and the higher rate on heavier soils (high in clay or organic matter); for post-emergence application, use the lower rate on smaller weeds and the higher rate on larger weeds.

SOIL LIMITATIONS: Crop injury may result from failure to observe the following: Unless otherwise directed, do not use on sand, loamy sand, gravelly soils or exposed subsoils; nor on alfalfa, apples, artichoke, barley (winter), Bermudagrass pasture, citrus, cotton (preplant and layby), grapes, oats, olives, papayas, peaches, pears, plerosus fern, sorghum, sugarcane, wheat and wheat (winter), where organic matter is less than 1%, nor on blueberries, bird-foot trefoil, canberries, gladiolus, gooseberries, Macadamia nut, papawant where organic matter is less than 1%.

BEST DOCUMENT AVAILABLE

#10163-6393

PLANTING: Unless otherwise directed, do not replant treated areas to any crop within 2 years after last application in order to avoid crop injury result.

FIELD CROPS (See Soil Fertilization)

A good seedbed must be prepared before pre-emergence use of diuron as crop injury may result if application is made to ground which is cloddy or compacted resulting in improperly planted seed. Plant seed to depth specified. Unless otherwise directed, surface of the soil should not be cultivated or disturbed after application of Diuron and before emergence of the crop as weed control may be reduced and crop injury may result. However, if moisture is insufficient to activate the herbicide, a shallow cultivation (rotary hoe preferred) should be made after emergence of crops while weeds are small enough to be controlled by mechanical means.

ALFALFA - Treat only stands established for 1 year or more. Do not apply to seedling alfalfa nor to alfalfagrass mixtures; do not apply to established alfalfa with unusually shallow root penetration (such as shallow hard pans, in alkali spots) as crop injury may result.

Idaho, Oregon, Washington: Use 1 1/2-3 lbs. per acre; for control of volunteer alfalfa, use 4 lbs. per acre. Apply in fall after alfalfa becomes dormant but no later than mid-December.

California (Dormant and Semi-Dormant Varieties): Use 1 1/2-3 lbs. per acre; for control of volunteer alfalfa, use 4 lbs. per acre. Apply in fall after alfalfa becomes dormant (or semi-dormant for such varieties) but no later than January. Treated areas may be replanted to any crop after 1 year of last application if rate does not exceed 2 lbs. per acre.

Arizona, Nevada: Use 1 1/2-3 lbs. per acre; apply in fall after alfalfa becomes dormant but not later than January.

Eastern Colorado, Kansas: For control of tansymustard, apply 1 lb. per acre shortly after emergence of mustard in the fall or winter; use 2 lbs. per acre if weeds are 2"-4" in height. Alternatively, if other annual weeds are present, apply 2-3 lbs. per acre in February or March.

Other Areas Where Alfalfa Becomes Winter Dormant: Use 1 1/2-3 lbs. per acre (1 1/2-2 lbs. per acre East of Appalachian Mountains). Apply in March or early April, but before spring growth begins.

ARTICHOKE - California: Apply 2-4 lbs. per acre in late fall or early spring after the last cultivation. Apply before weeds germinate or to early seedlings. Direct spray to cover the area between the rows and around of artichoke plants, keeping contact with crop plants at all times.

BEST DOCUMENT AVAILABLE

#10/63-

6393

**ASPARAGUS** - Apply as a pre- or post-emergence treatment. Do not apply to young plants during the first growing season (except as noted below), nor to newly seeded asparagus plants with exposed roots, as severe injury may result.

Established Planting: On light sandy soils and other soils low in clay or organic matter, apply 1-2 lbs. per acre. On soils high in clay or organic matter, use 2-4 lbs. per acre. Two applications may be used, the first application should be made before weeds become established but no earlier than 4 weeks before spear emergence and no later than the early cutting period (if weeds are controlled into the cutting period by cultural practice, application may be delayed until immediately after the last cultivation); a second application may be made immediately following completion of harvest provided rainfall is expected. When two applications are used in one season, do not exceed 5 lbs. per acre per application. In Washington (irrigated crop), apply only a single treatment of 4 lbs. per acre in late November or December.

**Newly Planted Crowns** -- California (San Joaquin Delta): Make a single application of 2-4 lbs. per acre on soils high in clay or organic matter; use the lower rate on clay loams and the higher rate on peat soils. Do not use on soils containing less than 2% organic matter. Soil must be settled by rainfall or irrigation prior to treatment. Do not treat crowns planted to a depth of less than 2".

**BARLEY Winter (Drill-Planted)** -- Western Oregon and Western Washington: Make a single application of 1½-2 lbs. per acre as soon as possible after planting but before emergence of barley. Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

**BERMUDAGRASS PASTURES (Newly Sprigged)**: Apply 1-3 lbs. after planting and before emergence of Bermudagrass or weeds. Alternatively, for control of emerged annual weeds up to 4" in height, apply ½-1 lb. per acre; add 1 pt. of a surfactant per 15 gals. of spray. If Bermudagrass has emerged at time of treatment, temporary burn of exposed plant parts may occur.

Plant sprigs (stolons) 2" deep in a well-prepared seed bed; do not treat areas where sprigs are planted less than 2" deep as crop injury may result. Do not graze or feed forage from treated areas to livestock within 7 days after application.

**BIRDFOOT TREFOIL (Lotus)** - Western Oregon: Treat only stands established for at least 1 year; do not apply to seedling trefoil as injury may result. Make a single application of 2 lbs. per acre when trefoil is dormant (October 15 to December 15). Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

## BEST DOCUMENT AVAILABLE

#10163-

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Post-emergence - Make a single application of 2/3-1 lb. per acre in combination with non-pressure nitrogen solution. If nitrogen solution is not used, apply 1 lb. per acre; add 1 pt. of a surfactant per 25 gals. of spray. Apply as a directed spray when corn is at least 20" high and weeds are not taller than 3". DO NOT APPLY OVER TOP OF CROP. Do not replant to any crop within 1 year except that cotton, corn and grain sorghum may be planted the spring following treatment.

Pre-emergence - Arkansas, Louisiana, Mississippi and Tennessee: Make a single application of 2/3-1 lb. per acre as a broadcast or band treatment after planting but before corn emerges. Plant corn at least 1 1/2" deep. Do not replant treated areas to crops other than corn or cotton within 4 months following band treatment and 6 months following broadcast treatment as crop injury may result.

COTTON - Diuron alone or as recommended combinations, may be applied as preplant, pre-emergence, early post-emergence, and/or lay-by treatments. However, during a single crop season, do not exceed the following amounts of Diuron per acre as injury to subsequent crops may result: 1 lb. on loamy sand; 1 1/2 lbs. on sandy loam; 2 lbs. on clay loam; 2 3/4 lbs. on clay.

Preplant -- Arizona and California Only: Apply Diuron as a broadcast spray after beds are formed, pre-irrigated, and final seed beds prepared. Prior to planting, drag-off the tops of the beds and plant in moist soil not treated with Diuron. Treated soil is returned to the bed after planting when irrigation furrows are re-formed after cotton has emerged. If more than two furrowing-out operations are made prior to lay-by, or deep furrows are made early, weed control may be reduced in furrow bottoms. Use at the following rate: 1-2 1/2 lbs. per acre.

Pre-emergence: Apply immediately after cotton is planted; whenever possible, planting and spraying should be combined in one operation. Shallow incorporation (no deeper than 1") with a rotary hoe or similar equipment following planting usually improves results especially during dry weather. A wide press wheel should be used on the planter to provide a level seed bed for subsequent early season post-emergence treatments. If moisture is insufficient to activate Diuron or if soil becomes crusted before crop emerges, a shallow rotary hoeing (no deeper than 1") should be made before weeds become established.

Diuron Rates (except Arizona and California): Make a single application as a broadcast or band spray after planting but before cotton emerges. Do not treat cotton in deep furrows as crop injury may result. Use at the following broadcast rate; for band treatments, proportionately less. In heavy sand use 2/3 lbs. per acre. In sandy loam, loam, silt loam, silt use 1 lb. per acre. In sandy clay loam, clay loam, silty clay loam, sandy clay use 1 1/2 lbs. per acre. In silty clay, and clay use 2 lbs. per acre.

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**Post-emergence:** Apply only as a directed spray to cover weed foliage; adjust nozzles to minimize contact of cotton leaves with spray or drift or crop injury may result. **DO NOT SPRAY OVER TOP OF COTTON.**

**Early Season --** Apply when cotton is at least 6" tall (at least 12" tall for western irrigated cotton), and when weeds are actively growing and do not exceed 2" in height. Apply as a band treatment at following rates; for each 25 gals. of spray, add 1 pt. of a surfactant. Two applications may be made if needed. For a weed problem (up to 2" tall) in annual grasses use 1/2 lb. Diuron per acre (broadcast basis). For pigweed use 1/4 lb. per acre (broadcast basis). For control of seedling perennial grasses such as Johnsongrass and partial control of nutsedge or when weed growth is under drought stress or as high as 4", add 2-3 1/2 lbs. disodium methylarsenate to the above spray mixture. If disodium methylarsenate is used, do not apply after first bloom and do not feed treated foliage to livestock.

**Late Season (Lay-By) --** Apply 1-1 1/2 lbs. per acre (1-2 lbs. in Arizona and California) when cotton is at least 12" tall (at least 20" tall for Pima S-29). For control of germinating weed seedlings, apply to soil beneath cotton plants and between rows immediately after last cultivation. In irrigated cotton, best weed control is obtained if the field is irrigated within 3 to 4 days after application. Thoroughly wet the surface of the ground over the row to carry the herbicide into the root zone of germinating weeds. Alternatively, for control of emerged annual weeds (up to 4" in height) at lay-by time, make a single application in combination with a surfactant (1 pt. per 25 gals. spray), or use 1/2 - 3/4 lb. Diuron (plus surfactant) per acre and repeat later if needed.

**Replanting:** If initial seeding fails to produce a stand, cotton may be replanted in soil treated preplant or pre-emergence with Diuron. Wherever possible, avoid disturbing original bed. If necessary to rework soil before replanting, use shallow cultivation such as disking; do not re-list nor move soil into the original drill area. Plant seed at least 1" deep. Do not re-treat field with a second preplant or pre-emergence application during the same crop year as injury to the crop may result.

**Subsequent Crops:** The crops that may follow treated cotton and the type of application follows; For band pre-emergence or postemergence: Any crop 4 months after last application may follow. For band pre-emergence plus post-emergence or broadcast pre-emergence (and preplant) or broadcast pre-emergence plus band post-emergence: Cotton, soybeans, corn or grain sorghums (not sorghos or forage sorghums nor grass sorghums) the next spring. Do not replant treated areas to any other crop within one year after last application as injury to subsequent crops may result. For broadcast post-emergence: Cotton, corn, grain sorghums (not sorghos or forage sorghums nor grass sorghums) the next spring. Do not replant treated areas to any other crop within one year after last application as injury to subsequent crops may result.

12

BEST DOCUMENT AVAILABLE

#10163-

6393

CRAB GRASS (Dactyloctenium aegyptium) - except as noted, apply only to established plantings at least 1 year old.

Colorado, Kansas, New Mexico and Oklahoma: On smooth brome, side oats grama, and witchgrass, apply 2-3 lbs. per acre during the dormant period shortly before weed seedlings emerge. Do not apply after crop begins growth in the spring as crop injury may result. In fields where ash residues have accumulated from burning straw, use 3 lbs. per acre; spread unburned chaff or straw with a harrow or chopper before application.

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Western Oregon: On alta fescue, astoria bentgrass, highland bentgrass, Kentucky bluegrass, merion bluegrass and orchardgrass, apply 2-4 lbs. per acre between October 1 and November 15. In field where ash residues have accumulated from burning straw, use 3-4 lbs. per acre; spread unburned chaff or straw with a harrow or chopper before application. If perennial ryegrass (Lolcus lanatus) is a problem, use 4 lbs. per acre. For best results, apply as soon as possible after fall rains start. Established weeds (around 2 to 3 leaf stage) should be removed prior to treatment.

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Well established vigorous stands of spring-planted alta fescue, Kentucky bluegrass and orchardgrass may be treated the following fall provided the crop is planted before April 1 and treatment is not applied before October 15; use 2 lbs. per acre.

Oregon: For use in newly planted bentgrass, Chewings fescue, Kentucky bluegrass, perennial ryegrass, orchardgrass and tall fescue. During planting operation, activated charcoal in a 1" band on soil surface at rate of 500 lbs. per acre (broadcast basis; equivalent to 15 lbs. per acre of crop where row spacing is 20"). Mount nozzles to apply directly over seed rows to prevent crop injury. Follow with Dicron as a single broadcast spray at rate of 2.5 lbs. per acre apply as soon as possible after planting but before crops or weeds emerge and before rains or sprinkler irrigation. Fall or spring plantings may be treated; best results usually occur with early fall plantings. Treatment will not control lowly brome or wild oats.

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OAS (Drill-Planted): Do not replant treated areas to any crop within one year after last application as injury to subsequent crops may result.

SPRING OAS -- Idaho, Eastern Oregon, Eastern Washington: Use in areas where average annual rainfall exceeds 10". Make a single application of 1-2 lbs. per acre after planting, either before or after oats emerge but within 4 weeks of planting. Best results are usually obtained when application is made 2-4 weeks after planting. Apply before weeds are 3" to 4" tall.

WINTER OAS -- WASHINGTON WITH BEAN OR VEGETABLE -- Western Oregon and Washington: Make a single application of 1-2 lbs. per acre as soon as possible after planting but before emergence of the crop.

PERENNIAL -- Puerto Rico: Apply 2 lbs. per acre in 1st fall cultivation in the spring prior to emergence of pepperment. Do not apply to newly planted fields in 1st year after emergence of pepperment.

12



Fig. 5

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BEST DOCUMENT AVAILABLE

#10163-6393

DIURON GRANULES - 50% active ingredient. Apply 10 to 15 lbs. per acre; add 1 pt. of a surfactant per 2 gals. of spray. Apply as a directed post-emergence broadcast or as a spray inter-row or 15" band to control weeds. "10-15" banding is more effective than broadcast application. Lower rates of 10 lbs. per acre may be used in areas where the soil is sandy or where the weeds are not very competitive. Lower rates are also useful where application may be difficult. Provided the amount applied in any crop year does not exceed 100 lbs. per acre, treatment of weed and drought stress is mainly ineffective.

Do not replant treated areas to crops other than cotton or corn within 1 month following band treatment and 6 months following broadcast treatment as crop injury may result.

SHARON - To prevent possible crop injury on new cane varieties, tolerance to Diuron should be determined prior to adoption as field practice. Do not treat sugarcane growing on fairly covered sub-soil or rocky areas as crop injury may result. Temporary chlorosis of the crop may result from application over emerged cane; to minimize chlorosis, use directed post-emergence sprays.

Florida: For high organic soils, apply 2-4 lbs. per acre as a broadcast or band spray prior to weed emergence after planting or after harvesting plant crop (for ratoon crop). A second and third application of 2 lbs. per acre may be made as needed by directed spray inter-row. Do not apply more than 5 treatments nor more than 6 lbs. total per acre between planting (or ratooning) and harvest.

Hawaii and Puerto Rico: Apply 4 to 8 lbs. per acre as a broadcast spray prior to weed emergence after planting or after harvesting plant crop (for ratoon crop). A second and third application of 4 to 4 lbs. per acre may be made as a broadcast spray over emerged cane or by directed spray inter-row.

If weeds are emerged, add a surfactant to the spray at the rate of 1 to 2 qts. per 100 gals. and apply as a directed spray. DO NOT SPRAY OVER TOP OF CANE...

Do not apply more than 5 treatments nor more than 10 lbs. Diuron or 12 lbs. (Banii) total per acre between planting (or ratooning) and harvest. Treated areas may be planted to sugarcane or pineapple one year after last application.

Louisiana: Use on plant cane seeded on fallowed ground. Make a single application of 3-5 1/2 lbs. per acre at either of the following times: late August (August through October) - treat a 2 ft. band over the row at planting of cane, but before weeds or cane emerge. Spring treatment may be made April 1. If slugs and other insects are present, treat with insecticide over the row before or after Diuron.

MEAL, WAXED - 90% Diuron. Use on any crop except sugarcane. Apply 10 to 15 lbs. per acre as a directed broadcast or as a spray inter-row or 15" band to control weeds. "10-15" banding is more effective than broadcast application. Lower rates of 10 lbs. per acre may be used in areas where the soil is sandy or where the weeds are not very competitive. Lower rates are also useful where application may be difficult. Provided the amount applied in any crop year does not exceed 100 lbs. per acre, treatment of weed and drought stress is mainly ineffective.

BEST DOCUMENT AVAILABLE

#10163-5393

gravely or sandy soils low in organic matter (less than 1%), nor on thin or thin covered or exposed sub-soil areas (dry fields); do not treat wheat planted less than 1" deep; do not treat wheat where winter climatic conditions have caused "heaving" of plants; do not treat wheat plants lacking in vigor due to poor emergence, insect damage, disease, high alkalinity or other causes; do not apply after wheat has reached the "boot" stage of maturity; do not use with other pesticides except as noted, particularly, or nitrogen addition.

Do not replant treated areas to any other crop within 1 year after last treatment as injury to subsequent crop may result. East of Cascade Range -- If fall-planted wheat fails to grow due to winter kill or adverse growing conditions after fall treatment, only fields treated before November 1 may be replanted to spring wheat. Spring wheat should not be planted before April 1 and only after deep disking and plowing to a depth of 4" - 6" prior to planting. Do not retreat field with a second application during the same crop year as injury to the crop may result.

Idaho, Oregon and Washington -- West of Cascade Range: Make a single application of 1½-2 lbs. per acre. Apply as soon as possible after planting. If wheat and weeds have emerged, apply before weeds are 3" to 4" tall.

East of Cascade Range -- Areas Where Average Annual Rainfall Exceeds 16 inches: Make a single application of 1-1½ lbs. per acre. Fall Treatment: For early fall-planted wheat (seeded before September 10), apply 3 to 6 weeks after planting but before weeds are 3" - 4" tall. Treatment after October 1 has generally given best results. Application should not be made after soil freezes in the fall. Wheat planted in late October should not be treated until the following spring. Spring Treatment: Apply as soon as wheat starts to grow in the spring. Treatment made prior to April 10 will usually give good results provided weed growth is less than 4" tall. Application later than May 1 may give poor results.

Alternatively, make a single application of ½ to 1 lb. Diuron plus ½ lb. bromoxynil per acre as a tank mixture, either in the fall after wheat has emerged but before soil freezes or in the spring as soon as soil thaws, apply before weeds are 2" tall or across.

Areas Where Average Annual Rainfall is 10 to 16 inches: After wheat is planted in the fall, make a single application of 1 to 1½ lbs. per acre when sufficient moisture is available to germinate wheat seed. Apply before soil freezes and before weeds are 2" tall. Application later than March 1 may give poor results.

Other areas: Make a single application in the spring as soon as wheat is planted starts to grow and before weeds are 2" tall. Application later than May 1 may give poor results.

Central Plains and Midwest: 1½ to 2 lbs. per acre.

Kansas, Oklahoma and Texas: 1½ to 2 lbs. per acre.

## BEST DOCUMENT AVAILABLE

Northeast: Use 1 to 1½ lbs. per acre.

FRUIT AND NUT CROPS: See label for directions.

Unless otherwise directed, make a single application per year as a directed spray, avoiding contact of foliage and fruit with spray or drift. Do not graze live stock in treated orchard for 30 days.

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6393

APPLES, PEARS: Use only near trees established in the orchard for at least 1 year; do not treat varieties grafted on full-dwarf root stocks. Apply 1 lbs. per acre in the spring (March through May) under individual trees or as a band treatment in the tree row. In the far West, treatment may be made in winter (December through February), or apply 2 lbs. per acre as a post-harvest treatment followed by 2 lbs. in the spring.

BANANAS -- New Plantings: To control annual weeds, apply 1½ to 3 lbs. per acre after planting but before plants emerge. Do not apply to loam soil directly over the planting material.

Established Plantings: For control of annuals and for top-kill of perennials such as Bermudagrass, birdsfoot grass and guineagrass, apply 3 to 6 lbs. per acre plus 1 pt. of a surfactant per 25 gals. of spray; avoid contact of banana plants with spray or drift as injury may result. When tall, dense weed growth is present, remove weed growth before application. If application is made to soil free of weeds, omit the surfactant from the spray. Repeat treatment as needed, but do not apply more often than 6-week intervals nor more than a total of 12 lbs. per acre (broadcast basis) in a 12-month period.

NOTE: Do not replant treated areas to any crop within 2 years after last application as injury to subsequent crops may result, except that sugarcane or pineapple may be planted one year after last application.

BLUEBERRIES, CANCELERRIES AND GOOSEBERRIES: Use only in fields which have been established for at least 1 year. Do not apply to berries interplanted with fruit trees; do not apply to plants whose roots are exposed as injury may result. Apply as a band treatment at base of canes or bushes; for spring application, apply before germination and growth of annual weeds.

Indiana, Michigan and Ohio - Blueberries: Apply 2 to 4 lbs. per acre in late spring; alternatively, apply 2 lbs. per acre in the fall and repeat at same rate in the spring. Raspberries: Apply 3 lbs. per acre in the spring.

Massachusetts - Blueberries: Apply 2 lbs. per acre in late spring.

New Jersey - Blueberries: For control of winter annuals, apply 2 lbs. per acre in October, November or December.

California - Raspberries, Blackberries, Boysenberries, Elderberries and Gooseberries: For control of winter annuals, apply 2 lbs. per acre in late spring.

BEST DOCUMENT AVAILABLE

(booklet)

14

#10163-6393

... apply it at a rate in late spring to control annual weeds. A single application of 5 lbs. per acre in January or February will control both winter and summer annuals in some areas, but the separate fall and spring schedule is preferred.

Western Oregon and Western Washington - blackberries, raspberries and gooseberries. The same schedule is recommended for California.

CITRUS - The only under trees established in the grove for at least 1 year. The application as indicated for specific areas, except application may be made any time of the year where sprayer or flood irrigation can be used to activate the herbicide. Established perennial weeds require other special control procedures. Do not apply under citrus trees that have been subjected to freezing within 6 months.

Arizona (except Yuma area) and California (except Imperial and Coachella Valleys) - Oranges, Lemons and Grapefruit: Apply 5 to 4 lbs. per acre shortly after grove has been laid up in final form (non-tillage program) in late fall or early winter. Alternatively, apply 2 lbs. per acre in October or November and repeat at the same rate in March or April. Subsequent annual application of 2 to 3 lbs. per acre will usually give adequate weed control.

Florida - Oranges, Grapefruit, tangelos and Tangerines: Make a single application of 4 to 8 lbs. per acre, or apply 5 to 4 lbs. per acre followed by the same rate 4 to 6 months later. On bearing citrus, apply any time when seasonal rains are expected; on non-bearing trees, apply when winter banks are pulled down.

For control of guineagrass, loosestrife, maidencane, paragrass, primrose willow and seamyrtle in ditches adjacent to citrus groves, use 1 lb. per 1000 sq. ft. (10 lbs. per acre) in sufficient water (min. 4 gals per 1000 sq. ft.) to provide thorough and uniform coverage. Apply in the spring before weed growth starts or after removal of vegetation. Repeat treatment on spot basis to control hard-to-kill species such as guineagrass. In bedded groves, do not treat water furrows between the beds as injury to the trees may result.

Texas - Oranges and Grapefruit: Apply 2 to 4 lbs. per acre for annual weeds; use 4 to 6 lbs. per acre for control of Johnsongrass seedlings. Best results accompanying application in the spring; well established weeds should be eliminated by cultivation prior to treatment.

GRAPES: Apply only to established vineyards not less than 5 years old, and treat to grape rows. Do not apply to vines with trunks less than 1 1/2 inches in diameter or apply to vines with a diameter of 1 1/2 inches or more if severe plant injury may result. In sandy soils, any water applied to the vines must be applied slowly.

East of the Rocky Mountains - Apply 1 lb. per acre on clay or loess soil.

15

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apply 2 to 5 lbs. per acre; on soil rich in clay or organic matter, apply 5 to 6 lbs. per acre. Apply in the spring just prior to germination and growth of annual weeds.

West of the Rocky Mountains: Apply in December, January or February. For the first treatment, apply 2 to 4 lbs. per acre. Repeat annual applications of 2 lbs. per acre with a spray gun for adequate weed control. Alternatively, apply 2 lbs. per acre in October or November and repeat at same rate in March or April.

New York and Pennsylvania -- Perennial Grasses: Use only in established vineyards (at least 4 years old) for spot control of perennial grasses, such as orchardgrass, quackgrass and ryegrass. Apply in the prime as a band treatment to ridged soil (2" to 4") under the trellis at the rate of 8 to 12 lbs. per acre. Band width should not exceed 30". Do not apply more than once every 4 years. Use only on heavy soils such as loams, silt loams, clay loams. Do not use in areas where grape roots are shallow or exposed because of high bedrock, poor drainage, or erosion as injury to grapes may result.

MACADAMIA NUTS - Hawaii: Use only under trees established in the orchard for at least 1 year. Apply 2 to 6 lbs. per acre immediately after harvest, preferably before weeds emerge; if weeds have merged, add 1 pt. of a surfactant per 25 gals. of spray. Re-treat as needed but do not exceed 10 lbs. per acre per year.

OLIVES - California: Use only under trees established in the grove for at least 1 year. Apply 2 lbs. per acre after grove has been laid-up in final form in late October or November; repeat at same rate in March or April. Remove weed growth prior to treatment.

PEACHES: Use only under trees established in the orchard for at least 3 years. Apply 2 1/2 to 5 lbs. per acre in the early spring before weeds emerge or during the early seedling stage of weed growth. Do not apply within 5 months of harvest; in the far West, do not apply within 8 months of harvest.

PAPAYAS: Use only under trees established in the orchard for at least 1 year. Apply 2 1/2 to 5 lbs. per acre, preferably before weeds emerge; if weeds have merged, add 1 pt. of a surfactant per 25 gals. of spray.

PEACHES: Use only under trees established in the grove for at least 1 year. Apply 2 to 4 lbs. per acre in spring or early summer. Do not apply on soil with less than 1% organic matter.

PINEAPPLE - Hawaii: Apply 4 to 8 lbs. per acre as a broadcast application after planting and prior to weed emergence. Use 4 lbs. per acre as a pre-planting plant crop (for ratoon crop). For plant crop only, a second application of broadcast or interspace application may be made prior to differentiation at the rate of 2 lbs. per acre at intervals of not less than 1 month. A third application to plant crop may be made as needed to interrupt weeds. Do not apply more than 5 broadcast sprays to a plant crop prior to differentiation for more than 10 lbs. per acre. For ratoon crop, treat 1 acre only be planted to pineapple or other crop. Do not apply to application.

15

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#10163-6393

GLADIOLUS (gladiolus) - California: Use only on trees established in the orchard for at least 1 year. As an initial treatment, apply 2 to 5 lbs. per acre after the orchard has been laid-up in final formation-tillage program in late fall or early winter; re-treat annually with 2 to 5 lbs. per acre. After actively, apply 2 lbs. per acre in October or November and repeat at same rate in March or April.

ORNAMENTAL CROPS (see SOIL LIMITATIONS)

GLADIOLUS - East of Rocky Mountains: Apply 1 to 2 lbs. per acre as pre-emergence and/or directed post-emergence treatments; if used for both, do not exceed 1 lb. per acre per application, or a total of 2 lbs. per season. On cornel plantings, apply 1 lb. per acre pre-emergence or post-emergence, but not more than once. Do not use on cornel plantings in Florida; do not spray over top of gladiolus foliage nor allow spray to drift onto foliage as injury may result.

ORNAMENTAL BULB CROPS (Bulbous Iris, Narcissus, Tulips) - Western Washington: Make a single application of 4 lbs. per acre, except use 3 lbs. per acre for tulips planted in light soils (sandy loam, loam). Apply after planting but no later than 1 week prior to bulb emergence (usually late September or October). Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

PLUMOSUS FLRW - Florida: Hand weed and sow fern; then make a single application of 3 lbs. per acre within 3 to 5 days. Do not cultivate or disturb soil after application as crop injury may result. Treat only established stands at least 1 year old.

TREE PLANTINGS - Colorado, Montana, Nebraska, North Dakota, South Dakota, Wyoming: Use only under established plantings (1 year or older) of American elm, caragana, cottonwood, Douglas fir, green ash, honeysuckle, Lombardy pine, red cedar, Russian olive and Siberian elm. Use 2 1/2 to 5 lbs. per acre; apply as a band 4 ft. wide in the tree row (2 ft. on each side of row). For example, 1 oz. Diuron (4 level tablespoons) treats 155 ft. of tree row (2 ft. on each side of row) at the rate of 5 lbs. per acre. Apply as a directed spray in early spring before weeds emerge and before trees leaf out. Do not apply to foliage of trees, nor under trees growing in low areas as injury to the trees may result.

NON-CROP WEED CONTROL

Diuron is an effective herbicide for the control of many annual and perennial grasses and broadleaf weeds on bare ground areas where bare ground is desired. Rate and direction of effect will vary with the amount of chemical applied, soil moisture, rainfall and other conditions.

Diuron may be used as a pre-emergence treatment of weeds on bare ground when ground is from 1/2 inch to 1 1/2 inches moist. It is applied by hand or machine to the soil surface. It is not effective on weeds which have emerged.

10