

MAR 27 1989

Mr. Ralph P. Burton
Fermenta Plant Protection Company
5966 Heisley Road
P.O. Box 8000
Mentor, OH 44061-8000

Dear Mr. Burton:

Subject: Revised Labeling in Accordance with DCPA Registration Standard
Dacthal® G-2.5
EPA Registration No. 50534-17
Your Submission Dated February 21, 1989

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

When final labels are printed, describe gloves as "chemical resistant gloves" under the "Protective Clothing Required" heading.

Under the "Pesticide Disposal" heading, add "Do not contaminate water when disposing of equipment washwaters."

Submit one (1) copy of your final printed labeling before you release the product for shipment with the revised labeling.

Sincerely yours,

[Signature] Richard F. Mountfort ^{LJS}
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (H7504C)

Enclosure

52556:I:Ikeda:MF-10:KENCO:3/11/89:4/24/89:SG:EK:CT

CONCURRENCES							
YMBCL							
JRNAME							
DATE							

Net Contents Pounds/ Kilograms

SPECIMEN LABEL



Dacthal® G-2.5

Fungicide

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Precautionary Statements

Hazards to Humans and Domestic Animals

Caution

Causes eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Statement of Practical Treatment:

If in Eyes: Flush with plenty of water. Call a physician if irritation persists.

If Swallowed: Do not induce vomiting. If vomiting occurs spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Seek medical attention.

If on Skin: Wash thoroughly with soap and water.

ENVIRONMENTAL HAZARDS

Collect and incorporate granules spilled on the soil surface. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Do not contaminate water by cleaning of equipment or disposal of wastes.

Dacthal G-2.5 Herbicide ✓

A selective preemergent herbicide for control of annual grasses and certain broadleaved weeds in home flower and vegetable gardens and ornamental turf.

Read entire label carefully and use only as directed.

General Information ✓

Dacthal G-2.5 is a 2.5% granular formulation for use as a preemergence application for control of crabgrass and other annual grasses and certain broadleaved weeds on mineral soils. Dacthal G-2.5 is recommended for use on Turf; Home Flower Gardens; Nursery Stock; Strawberries; Seeded: beans (dry and snap), broccoli, brussels sprouts, cabbage, cauliflower, collards, cucumbers, garlic, kale, melons (cantaloupe, honeydew, watermelon), mustard greens, onions, potatoes (whole and cut pieces), Southern peas (blackeyed), soybeans, squash (winter and summer), turnip greens and turnips; Transplants: broccoli, brussels sprouts, cabbage, cauliflower, eggplant, garlic, peppers, onions, sweet potatoes, tomatoes and yams. ✓

For the control of grasses and some broadleaved weed species, such as smooth and large crabgrass, green foxtail, yellow foxtail, lovegrass, witchgrass, carpetweed, common chickweed, lambsquarters, purslane and Florida pusley Dacthal G-2.5 is recommended at 320 to 360 pounds per acre. A slightly higher rate of application (up to 420 pounds per acre) of this product may be required for control of barnyardgrass, ground cherry, dodder, browntop panicum, goosegrass, johnsongrass (from seed), redroot pigweed, spotted spurge, prostrate spurge and nodding spurge. A rate of 600 pounds per acre is recommended for control of annual bluegrass in turf. When Dacthal G-2.5 is used at the recommended rate, up to 3 months weed control can be expected. Bermudagrass, johnsongrass established from rhizomes, nutsedge, galinsoga, wild mustard, ragweed, smartweed and velvetleaf have not been effectively controlled with Dacthal G-2.5. ✓

Application should be made to a uniform weed-free soil surface within two to three days maximum following cultivation to prevent subsurface germinating weeds from becoming established. Disturbing the soil surface following application will reduce effectiveness. Rates of application can be reduced on crops by banding. Lawn spreaders should be properly calibrated prior to use to deliver G-2.5 granules at prescribed rate. Settings may vary between spreaders because of condition and other factors.

Dacthal G-2.5 can also be applied by the shaker can method. The ideal way of doing this is to measure off the area to be treated into small plots and then evenly sprinkle the prescribed quantity of Dacthal granules over this area.

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

Conversion Table - Acre to Smaller Areas

If Rate per Acre is	Amount of Dacthal G-2.5 to Apply	
	250 sq. ft.	1,000 sq. ft.
320 pounds per acre	1 lb 13 oz	7 lbs 5 oz
360 pounds per acre	2 lbs 1 oz	8 lbs 4 oz
420 pounds per acre	2 lbs 6 oz	9 lbs 10 oz
600 pounds per acre	3 lbs 7 oz	13 lbs 12 oz

If there is no rain within three or four days after Dacthal G-2.5 application, sprinkler irrigation (1/2 to 1 inch of water) should be used for best results.

Replanting: Replanting crops other than those included on this label in Dacthal treated soil within eight months of application may result in crop injury. If replanting is required because of an early crop failure, the planting of onions, seeded melons, potatoes, tomatoes, eggplants, or peppers at this time may result in crop injury. However, all crops on this label may be planted following harvest of a Dacthal treated crop.

Any application of Dacthal should be made prior to weed seed germination.

Directions For Use

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

DO NOT APPLY IN SUFFOLK COUNTY, LONG ISLAND, NEW YORK.

Protective Clothing Required: Wear a long-sleeved shirt, long-legged pants, gloves, shoes and socks when handling (mixing, loading or applying) pesticides or when cleaning and repairing equipment used during mixing, loading or application of pesticides.

In case of contact with skin, wash thoroughly with soap and water. Always wash hands, face and arms with soap and water after using pesticides before smoking, eating, drinking or toileting. Shower after work and do not reuse contaminated clothing. Clothing worn during work must be laundered separately from household articles before reuse.

Reentry: For commercial vegetable production, Do not enter treated areas for 24 hours after application unless wearing long sleeved shirt and long pants.

Ornamental Turf: Apply uniformly to established turfgrass at the rate of 400 pounds per acre in the early spring before crabgrass and other annual grasses and broadleaved weed seeds germinate. Crabgrass seed germination usually coincides with the time Forsythia blossoms start to fall. One application applied in early spring before weed seed germination usually provides seasonal control. In areas which commonly experience stands of late-germinating crabgrass and other annual weedy grasses, a second application at half the regular rate can be safely made two months after the first application. In order to control annual bluegrass (*Poa annua*) and other erratic or late-germinating grasses and weeds in northern states, a late summer or early fall application before weed seed germination of 600 pounds per acre of Dacthal G-2.5 should supplement the early spring application. Earlier applications are required in Southern United States. Consult agricultural experiment station or extension service weed specialist for date *Poa annua* seeds germinate in your area and make application at least two weeks prior to this date.

Early spring application of Dacthal G-2.5 may be made to new turfgrass seedlings after the grasses have exhibited a uniform greening of the newly sprouted grass, preferably when 1 to 2 inches in height.

Where some spring seeding is necessary, there should be a delay of approximately 60 days after the application of most preemergence herbicides, including Dacthal G-2.5. This delay increases the survival of desirable grasses. Fall seeding of permanent grasses can follow only a single application made either in early spring up to not less than within 60 days of seeding.

Dacthal is not recommended for use on putting-greens. Dacthal is not recommended on bentgrasses when mowed at putting-green heights. Do not apply to Dichondra.

Flower Gardens. Apply after establishment and conditions are favorable for good plant growth, or as a supplemental application at the rate of 360 lb. G-2.5 per acre. Apply to the soil following establishment or setting out of flower beds. Where possible, this should be done early in the spring. Delayed or secondary application when needed, can be made at any time provided beds have been cultivated and are free of weeds. Weed control up to three months or more may be expected following proper application. See list of ornamentals.

Nursery Stock or Ornamental Plantings: Apply at lining out, late fall, or early spring at the rate of 360 lb. G-2.5 per acre. Applications should be made to soil recently cultivated to a uniform texture. These can be made immediately following lining-out of stock. With established plantings, application should be made following proper cultivating to remove existing weeds. Where possible, this should be done early in the spring. Late summer applications may prove beneficial for control of fall-germinating weeds, if made following cultivation. Weed control up to three months or more may be expected following proper application. Dacthal G-2.5 is specifically recommended for weed control on the following nursery and ornamental plantings:

Abelia	Cypress	Juniper
Ageratum	Dahlia	Lantana
Alyssum	Delphinium	Larkspur, candle
Andromeda Jap	Deutzia	Lavendercotton
Arborvitae	Dogwood	Lilac
Ash	Elaeagnus	Lily
Aster	Elm	Locust
Azalea	Euonymus	Lupine
Babysbreath	Evening primrose	Magnolia
Barberry	Feverfew	Maple
Bellflower	Fir	Maguerite, golden
Birch	Forget-me-not	Marigold
Bleedingheart	Forsythia	Mockorange
Bloodleaf	Four-O'Clock	Morningglory
Boxwood	Foxglove	Moss, rose
Bugloss	Gaillardia	Mother-of-Thyme
Camellia	Geranium	Mountain Laurel
Candytufts	Gladiolus	Mourning Bride
Chestnut	Golddust	Nasturtium
Chrysanthemum	Goldentuft	Oak
Cinquefoil	Gum	Orpine
Coleus	Hawthorn	Pachistima
Columbine	Heath, pink	Pachysandra
Coneflower, purple	Holly	Peony
Coreopsis	Hydrangea	Petunia
Coralbells	Honeysuckle	Pine
Cosmos	Iris	Pittosporum
Cotoneaster	Ivy, Baltic	Podocarpus
Cottonwood	Ivy, Boston	Poker plant
Crabapple	Ivy, English	Poplar
Cuphea	Ivy, Wilson	Privet

Privet variegated	Spruce	Viburnum
Redbud	Stonecrop	Violet African
Rhododendron	Strawflower	Walnut
Rose	Sundrops	Weigelia
Russian olive	Sunflower	Willow
Sage scarlet	Sweet pea	Wormwood
Snapdragon	Sycamore	Yarrow fernleaf
Spiderwort Va	Tree peony	Yew
Spirea	Tulip tree	Zinnia

Do not use on the following plants

Bugleweed	Geum	Pansy
Button pink	Germander	Phlox
Carnation	Mesembryanthemum	Sweet William
		Telanthera

Note: See General Information to determine proper rate for your weed complex

Broccoli, Brussels Sprouts, Cauliflower, Cabbage: Apply uniformly to the soil at seeding or transplanting at rate of 320 to 420 lb.G-2.5 per acre. Dacthal granules can be applied directly over transplants without injury. If weeds have emerged, crops should be clean cultivated or weeded prior to application.

Beans (dry or snap), Southern Peas (blackeyed), Soybeans: Apply uniformly to the soil at time of seeding at rate of 320 to 420 lb.G-2.5 per acre.

Seeded Cucumbers, Squash (winter and summer), Melons (cantaloupe, watermelon honeydew): Apply uniformly to the soil at rate of 320 to 420 lb.G-2.5 per acre when plants have 4 to 5 true leaves, are well established and growing conditions are favorable for good plant growth. Crops should be cultivated or weeded prior to Dacthal application if weeds have emerged.

Collards, Kale, Mustard Greens, Turnips (greens and roots): Apply uniformly to the soil at rate of 320 to 420 lb.G-2.5 per acre at time of seeding.

Garlic and Onions: Apply uniformly to soil at seeding, or transplanting and on onions at layby at rate of 320 to 420 lb.G-2.5 per acre. Dacthal can be applied directly over transplants without injury. A layby application can be made on onions up to 14 weeks after seeding or transplanting. Should weeds emerge prior to layby, the crop should be cultivated or weeded before application.

Potatoes (whole or cut pieces): Apply uniformly to the soil at rate of 320 to 420 lb.G-2.5 per acre at planting, drag-off or layby. If top of beds are to be dragged off, make application after drag-off. Layby applications can be made up to 9 weeks after planting. If weeds have emerged at layby, the crop should be cultivated prior to application. The initial sprinkler irrigation should not exceed one inch. Dacthal is not recommended for use on potatoes in California.

Sweet Potatoes and Yams: Apply uniformly to the soil at rate of 320 to 420 lb.G-2.5 per acre at time of transplanting or layby. Dacthal can be applied directly over transplants without injury. Layby application can be made up to 6 weeks after transplanting. If weeds have emerged, the crop should be cultivated or weeded prior to making the Dacthal application.

Tomatoes, Eggplant, Peppers: Application uniformly to the soil at rate of 320 to 420 lb.G-2.5 per acre should be confined to a period 4 to 6 weeks after transplanting. Plants should be well established and growing conditions favorable for good plant growth. Dacthal can be applied directly over the plants without injury. If weeds have emerged, the crop should be cultivated or weeded prior to making the Dacthal application.

Strawberries: New plantings - Apply uniformly to soil at rate of 300 lb. per acre at time of transplanting. Established plantings - Apply in early fall and early spring at rate of 320 to 360 lb per acre to control fall and early spring germinating weeds. Do not apply after first bloom through harvest. These applications can be made directly over plants without injury.

Special Precautions: Do not feed treated foliage to livestock or graze treated areas. Applied according to directions and under conditions favorable to good plant growth. Dacthal G-2.5 will not harm crops for which its use is recommended, however, conditions such as high salt concentration, seedling disease, cold weather, deep planting, excessive moisture or drought may injure or weaken crops normally tolerant to Dacthal G-2.5, thereby increasing the possibility of herbicide damage. Under any of these conditions, one or more of the following may result: delayed crop development, reduced yields or reduced quality.

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Storage: Store in a dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility.

Container Disposal: Completely empty bag into application equipment and dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Warranty and Limitation of Damages

Seller warrants that this material conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use and Buyer assumes the risk of any use contrary to such directions. Seller makes no other express or implied warranty, including any other express or implied warranty of Fitness or of Merchantability, and no agent of Seller is authorized to do so except in writing with a specific reference to this warranty. In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.