



# MANZATE 200

FUNGICIDE

### ACTIVE INGREDIENT:

A coordination product of zinc ion and manganese ethylene bisdithiocarbamate ..... 80%  
 in which the ingredients are  
 Manganese ..... 16%  
 Zinc ..... 2%  
 Ethylene bisdithiocarbamate ion  
 (C<sub>4</sub>H<sub>8</sub>N<sub>2</sub>S<sub>2</sub>)<sub>2</sub> ..... 62%

### INERT INGREDIENTS ..... 20%

U.S. Pat. 3,379,610

EPA Reg. No. 352-341

Keep out of reach of children

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS.

**CAUTION!** MAY IRRITATE EYES, NOSE, THROAT, AND SKIN. MAY BE HARMFUL IF INHALED OR SWALLOWED.

Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing. Keep away from fire or sparks.

Wear protective clothing including long pants, long sleeve shirt, gloves, hat and boots during mixing and loading operations.

**FIRST AID:** In case of contact, flush skin or eyes with plenty of water; for eyes, get medical attention.

#### ENVIRONMENTAL HAZARDS

This product is toxic to fish. Keep out of lakes, streams or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

**IMPORTANT**—Never allow "Manzate" 200 to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of "Manzate" 200 as a fungicide and create vapors which may be flammable. Keep container closed when not in use.

## NET 3 LBS.

MADE BY DU PONT IN COLUMBIA

E. I. DU PONT DE NEMOURS & COMPANY (INC.)  
BIOCHEMICALS DEPARTMENT, WILMINGTON, DELAWARE

### NOTICE OF WARRANTY

### DIRECTIONS FOR USE

AS A SPRAY

AS A DUST

### FIELD CROPS

WHEAT, BARLEY, OATS, RYE

ACTUAL SIZE



**4 DIRECTIONS** (CONTINUED FROM SIDE PANEL)

**SUGAR BEETS:** Cercospora leaf spot. Use 1 to 2 lbs. "Manzate" 200 per acre. Begin applications when disease first threatens and repeat at 7- to 10-day intervals. Do not apply within 14 days of harvest. Do not feed treated sugar beet tops to livestock.

**PEANUTS:** Cercospora leaf spot. Use 1 to 2 lbs. "Manzate" 200 per acre. Begin applications when disease first appears and repeat at 10- to 14-day intervals, or at 7-day intervals during humid weather. Do not feed treated peanut vine hay to livestock.

**COTTON** (Southwest only) Rust. Use 1 to 2 lbs. "Manzate" 200 per acre. Begin applications when rust first appears in the area and repeat at 10- to 14-day intervals. Do not apply after bolls open, do not graze treated areas nor feed gin trash to livestock.

**VEGETABLE CROPS**

**POTATOES:** Early and late blights. Use 1 to 2 lbs. "Manzate" 200 per acre. Begin applications when plants are 4 to 6 inches high, repeat at 7- to 10-day intervals (more frequently under severe disease conditions) throughout the season.

**POTATO TUBER TREATMENT:** Fusarium seed piece decay. Dip whole or cut seed pieces in mixture of 1 to 2 lbs. "Manzate" 200 per 50 gals. water, drain, and plant immediately, if seed pieces are to be held before planting, spread out to dry in a cool place. For dust treatment, thoroughly coat with dust containing 10% "Manzate" 200 (8% active) at rate of 1 lb. per 100 lbs. of seed. Do not use treated seed pieces for food or feed purposes.

**TOMATOES:** Early and late blights, gray leaf spot, gray leaf mold, and anthracnose. Use 1 to 3 lbs. "Manzate" 200 per acre. Begin applications when seedlings emerge and repeat at 7-day intervals throughout the season. Do not apply within 5 days of harvest.

**Bacterial leaf spot.** Use 1 to 2 lbs. "Manzate" 200 combined with 4 lbs. tribasic copper sulfate per acre. Begin applications when seedlings emerge, and repeat at 3- to 4-day intervals as needed. Do not apply within 5 days of harvest.

**CUCUMBERS, MELONS, SUMMER SQUASH:** Anthracnose, Alternaria and Cercospora leaf spots, downy mildew, gummy stem blight, and scab. Use 2 to 3 lbs. "Manzate" 200 per acre. Begin applications at the 2-leaf stage and repeat at 5- to 7-day intervals. Do not apply within 5 days of harvest.

**CORN** (Sweet, Field, Popcorn) Helminthosporium leaf blight. Use 1 to 2 lbs. "Manzate" 200 per acre. Begin applications when disease first appears and repeat at 4- to 7-day intervals. Do not apply to field corn or popcorn within 40 days of harvest. Do not apply to sweet corn within 7 days of harvest, do not feed treated sweet corn forage or fodder to livestock.

**ONIONS** (Dry Bulb) Botrytis leaf blight, downy mildew, neck rot, and purple blotch. Use 2 to 3 lbs. "Manzate" 200 per acre. Begin applications when diseases are first reported in the area and repeat at 7-day intervals throughout the season. Do not apply within 7 days of harvest, do not apply to exposed bulbs.

**CELERY, FENNEL:** Early and late blights. Use 2 lbs. "Manzate" 200 per acre. Begin applications in plant bed as soon as plants emerge, repeat at 3- to 5-day intervals in plant bed and at 7-day intervals after plants are set in field. Do not apply to celery within 14 days of harvest nor to fennel within 7 days of harvest.

**CARROTS:** Alternaria and Cercospora leaf spots. Use 1 to 2 lbs. "Manzate" 200 per acre. Begin applications when disease first appears and repeat at 7- to 10-day intervals. Do not apply within 7 days of harvest, do not use treated tops for food or feed purposes.

**ASPARAGUS:** Rust. Use 2 lbs. "Manzate" 200 per acre. Begin applications when rust first appears and repeat at 10-day intervals as needed. Use only on ferns after spears have been harvested.

**FRUIT CROPS**

**APPLES, PEARS, CRABAPPLES, QUINCE:** Bitter rot, black rot, brown rot, cedar apple rust, fly speck, scab, and sooty blotch. Use "Manzate" 200 at 1 to 2 lbs. per 100 gals. of finished spray and apply up to 10 lbs. product per acre per application (for low volume sprays adjust accordingly). Apply at 7- to 14-day intervals throughout the season. For scab, begin at green tip or delayed dormant stage; for cedar apple rust, at blossom time; for other diseases, at first cover. Add a spreader-sticker to spray mixture for last 30-40 days. Do not apply within 14 days of harvest and 30 days for apples, do not graze treated areas.

CONTINUED ON SIDE PANEL ▶

**DIRECTIONS** (CONTINUED FROM BACK PANEL)

**CRANBERRIES:** Fruit Rot. Use 3 to 6 lbs. "Manzate" 200 per acre. Begin applications at mid-bloom and repeat at 7- to 10-day intervals. Do not apply within 30 days of harvest.

**GRAPES:** Black rot, bunch rot, dead arm, and downy mildew. Use 1 to 4 lbs. "Manzate" 200 per acre. Apply when shoots are 1 to 1 1/2 inches long, when shoots are 3 to 5 inches long, and when shoots are 8 to 10 inches long. Continue at 10- to 14-day intervals but do not apply within 66 days of harvest, in California, do not apply after fruit set.

**PAPAYAS:** Anthracnose and Phytophthora fruit rot. Use 2 to 2 1/2 lbs. "Manzate" 200 per acre; add a spreader-sticker to spray mixture. Begin applications at flowering time; repeat at 14-day intervals, or at 7-day intervals under severe disease conditions. Treat crown and blossom area.

**SEED TREATMENT—WHEAT, BARLEY, RYE, FLAX:** Seed decay and seedling blights from many seed- and soil-borne organisms, covered smuts or bunt of wheat, barley, rye. Use "Manzate" 200 as an undiluted dust at rate of 2 oz. per bu. for flax, use 3 to 4 oz. per bu. Apply with any suitable dust treater, or mix directly with seed in planter box by thorough stirring.

**LABEL TREATED SEED** "This seed treated with Manzate" 200 fungicide. Do not use for food, feed, or oil purposes."

**NOTICE TO BUYER:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Do not re-use container. Bury empty container, or product that cannot be used, in a safe place away from water supplies, or dispose of by alternative procedures recommended by federal, state or local authorities. Open dumping is prohibited.