UPI

Supplemental Label

Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2014-2016 LIC. NO. 8026.71

MANZATE® FLOWABLE FUNGICIDE

EPA Reg. No. 70506-236

For Use on Walnuts

This supplemental label expires on July 30, 2016 and must not be used or distributed after this date.

DIRECTIONS FOR USE

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

The supplemental labeling and the entire MANZATE FLOWABLE FUNGICIDE container label, EPA Registration Number 70506-236, must be in possession of the user at the time of application. Read the label affixed to the container for MANZATE FLOWABLE FUNGICIDE before applying. Carefully follow all precautionary statements and applicable use directions. Use MANZATE FLOWABLE FUNGICIDE according to this supplemental labeling is subject to the use precautions and limitations imposed by the label affixed to the container for MANZATE FLOWABLE FUNGICIDE.

Read the Limitation of Warranty and Liability on the container labeling before buying or using MANZATE FLOWABLE FUNGICIDE. If terms are not acceptable, return the unopened package at once to Seller for full refund of purchase price paid. Otherwise, use by Buyer or any other User constitutes acceptance of the terms of the Limitation of Warranty and Liability on the container label.

USE RATES AND APPLICATION TIMING FOR USE ON WALNUTS

Disease	Rate MANZATE FLOWABLE FUNGICIDE per application	Directions for use
Walnut Blight (*Xanthomonas campestris* pv. *Juglandis*)	1.8 qts/A (1.8 lbs ai)	Apply by ground in a minimum of 100 gallons water per acre, or by air in a minimum of 10 gallons water per acre. Do not apply through any irrigation system. Begin applications at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage, or as needed if frequent rainfall occurs. The minimum reapplication interval is 10 days. Do not make more than 10 applications per season. Do not apply more than 18 quarts product (18 lbs ai) per acre per use season.
Restrictions: This product must be tank mixed with a fixed copper product (such as Cuprofix Ultra 40 Disperss, EPA Registration Number 70506-201) which is registered for use on walnuts. **Pre-harvest Interval:** Do not apply within 75 days before harvest.		

Rev. 08/05/2013

United Phosphorus,
Inc. 630 Freedom Business Center, Suite 402
King of Prussia, PA 19406
1-800-438-6071

Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2011-2013 LIC. NO.

8026.71

UPI

Supplemental Label

Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2014-2016 LIC. NO.

8026.71

MANZATE® FLOWABLE FUNGICIDE

EPA Reg. No. 70506-236

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. MANZATE® FLOWABLE Fungicide must be used only in accordance with the use directions on this label.

USE RATES AND APPLICATION TIMINGS

(See table on pages two and three attached)

IMPORTANT

BEFORE USING MANZATE® FLOWABLE, READ AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE EPA-REGISTERED LABEL.

This bulletin contains new or supplemental instructions for use of this product which do not appear on the package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

Read the Limitation of Warranty and Liability on the Section 3 Federal Product labeling before buying or using MANZATE® FLOWABLE. If terms are not acceptable, return the unopened package at once to Seller for full refund of purchase price paid. Otherwise, use by Buyer or any other User constitutes acceptance of the terms of the Limitation of Warranty and Liability on the Section 3 Federal product label.

Crops Included	Diseases Controlled	Rate per application Manzate® Flowable Qts/Acre	Remarks	Restrictions
Sugar apple Cherimoya Atemoya Custard apple Sweetsop	Anthracnose	1.6-1.8	Begin applications at flowering and continue at a 7-day retreatment interval. Applications made with aerial equipment must be made in a minimum spray volume of 10 gal/acre.	Do not apply more than 26.25 qts. product (26.25 lbs. active ingredient) per acre per year. Do not apply more than 14 applications per year. Applications may be

United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406
www.upi-usa.com
1-800-438-6071

UPI

Supplemental Label

Crops Included	Diseases Controlled	Rate per application Manzate® Flowable Qts/Acre	Remarks	Restrictions
				made up to the day of harvest.
Ginseng	Alternaria blight	1.5	Start applications when disease first threatens and repeat every 7-10 days as needed. In Wisconsin, apply with ground equipment and a minimum of 80 gallons of water per acre.	Do not apply more than 18 qts. product (18 lbs. active ingredient) per acre per year.) Do not apply more than 12 applications per year. Do not apply within 30 days of harvest.
Cucurbit crop group Chayote Chinese wax gourd Citron melon Cucumber Gherkin Gourd, edible Momordica spp. Muskmelon Pumpkin Squash, summer Squash, winter Watermelon	Anthracnose Cercospora leaf spot Downy mildew Gummy stem blight Scab Alternaria leaf spot	1.6-2.4	Start applications when the plants are in the two-leaf stage and repeat at 7- to 10- day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. For aerial applications, the minimum spray volume is 2 gallons per acre. Some cantaloupe varieties (i.e. Harvest Queen, Gold Star, Super Star, Sweet and Early, and	Do not apply more than 19.2 qts. product (19.2 lbs. active ingredient) per acre per year. Do not apply more than 8 applications per year. Do not apply within 5 days of harvest.

UPI

Supplemental Label

Crops Included	Diseases Controlled	Rate per application Manzate® Flowable Qts/Acre	Remarks	Restrictions
			Saticoy) are sensitive to Manzate® Flowable fungicide. Consult State Cooperative Extension Service Specialist prior to use.	
Mango Star apple (caimito) Canistel Mamey sapote Sapodilla White sapote	Anthracnose Phytophthora fruit rot Black spot (Cercospora)	1.6-2.0	Start applications at flowering and continue at 14- to 21-day intervals. Direct spray to crown and blossom area. Use 20 to 100 gallons water per acre.	Do not apply more than 28 qts. product (28 lbs. active ingredient) per acre per year. Do not apply more than 14 applications per year. Applications may be made up to the day of harvest.

United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406
www.upi-usa.com
1-800-438-6071

Manzate® Flowable
fungicide

Department of Agriculture
STATE OF HAWAII
LICENSED 8026.71
PERIOD 2011-2013 LIC. NO.

Department of Agriculture
STATE OF HAWAII
LICENSED
PERIOD 2014-2016 LIC. NO.
8026.71

Active Ingredients	By Weight
A coordination product of zinc ion and manganese ethylenebisdithiocarbamate	37.0%
in which the ingredients are:	
Manganese++	7.4%
Zinc++	0.9%
Ethylenebisdithiocarbamate ion ($C_4H_6N_2S_4$)	28.7%
Inert Ingredients	63.0%
TOTAL	100.0%

Contains 4.0 Pounds Active Ingredient Per Gallon

EPA Reg. No. 70506-236 EPA Est. No. 352-GA-002

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Contact the Rocky Mountain Poison Center at 1-866-673-6671 for emergency medical treatment information.

See Label for Additional Precautions and Directions for Use.

FOR CHEMICAL EMERGENCY:
Spill, leak, fire, exposure, or accident,
call CHEMTREC at 1-800-424-9300.

See inside for additional Precautionary Statements and complete Directions for Use.

Net Contents: 2.5 gal., 30 gal.

United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406
1-800-438-6071 • www.upi-usa.com

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if absorbed through the skin. Causes moderate eye irritation. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical resistant gloves (except pilots and seed-treatment handlers who are bagging treated seed or sewing bags containing treated seed).

In addition, mixers/loaders supporting chemigation applications to turf on sod farms must wear a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any R, P, or HE filter.

See Engineering Controls for additional requirements.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROL STATEMENTS:

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside, then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Cover or incorporate spilled treated seed. Do not contaminate water by disposing of equipment washwaters.

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes and socks
- Chemical resistant gloves made of any waterproof material.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter or allow others to enter treated areas until sprays have dried.

To the extent consistent with applicable law, United Phosphorus, Inc. will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by United Phosphorus, Inc. To the extent consistent with applicable law, User assumes all risks associated with such nonrecommended use.

MANZATE® Flowable, containing mancozeb, is recommended for use as a spray for the control of many important plant diseases.

APPLICATION INSTRUCTIONS

AS A SPRAY (Ground or Aerial Equipment) - Apply MANZATE® Flowable at the rate shown; use sufficient water to provide thorough coverage, use 20 to 100 gallons per acre for ground equipment and no less than 2 gallons per acre for aircraft. Add MANZATE® Flowable slowly to water in the spray tank with agitation, or premix thoroughly in separate holding tank for concentrate or aircraft sprayers. Continuous agitation is required to keep the product in suspension. A spreader-sticker spray adjuvant may be used with this product if needed; contact your local product distributor or United Phosphorus, Inc. representative for specific directions.

RESTRICTIONS

Foliar Applications

Where EBDC Products Used Allow the Same Maximum Poundage of Active Ingredient Per Acre Per Season

If more than one product containing an EBDC active ingredient (maneb, mancozeb or metiram) is used on a crop during the same growing season and the EBDC products used allow the same maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed any one of the specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

Where EBDC Products Used Allow Different Maximum Poundage of Active Ingredient Per Acre Per Season

If more than one product containing an EBDC active ingredient is used on a crop during the same growing season and the EBDC products used allow different maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed the lowest specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

SEED TREATMENT

In addition to the maximum number of foliar applications permitted by the formula stated above, a single application for seed treatment may be made on crops which have registered seed treatment uses.

CHEMIGATION

Apply MANZATE® Flowable Fungicide only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems. Do not apply MANZATE® Flowable through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Specific Instructions for Public Water Systems:

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Good agitation is required in the injection tank.
9. In moving systems, apply specified dosage of MANZATE® Flowable as a continuous injection. In non-moving systems inject MANZATE® Flowable for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.
10. Mix the amount of MANZATE® Flowable needed for acreage to be treated into the quantity of water determined during prior calibration. For moving systems inject into the system continuously for one complete revolution of the field. For non-moving systems inject into system for the time established during calibration.
11. Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all MANZATE® Flowable is flushed from system.

Specific Instructions for Sprinkler Irrigation Systems:

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Good agitation is required in the injection tank.
9. In moving systems, apply specified dosage of MANZATE® Flowable as a continuous injection. In non-moving systems inject MANZATE® Flowable for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.
10. Mix the amount of MANZATE® Flowable needed for acreage to be treated into the quantity of water determined during prior calibration. For moving systems inject into the system continuously for one complete revolution of the field. For non-moving systems inject into system for the time established during calibration.
11. Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all MANZATE® Flowable is flushed from system.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g. wind direction, wind speed, temperature, relative humidity) and method of application (e.g. ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Wind Speed

Do not apply at wind speeds greater than 15 mph.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of mancozeb. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

1. Do not apply with a nozzle height greater than 4 feet above the drop canopy.

CROP	DISEASES CONTROLLED	RATE OF MANZATE® FLOWABLE PER APPLICATION QTS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Apple	(See Pomefruit)			
Asparagus	Cercospora Leaf Spot, Rust	1.6	Start applications when rust first appears and repeat at 10-day intervals. Four applications are usually sufficient.	Apply only on asparagus ferns after spears have been harvested. Do not apply within 180 days of harvest in all states except CA and AZ (120 days). Do not apply more than 6.4 qts (6.4 lbs active) per acre per season.
Asparagus Crown (Planting Stock)	Crown Rot	0.8/100 gals	Dip clean, loosely packed crowns into continuously agitated fungicide suspension for 5 minutes. Drain and plant as soon as possible.	Wash dirty crowns before dip treatment. Replace suspension in clean tank when discolored by soil.
Banana (Including Plantain)	Sigatoka	1.6-2.4	Apply when leaves first appear and repeat every 14 to 21 days or as required. Use sufficient water to provide adequate coverage.	Do not apply more than 24 qts (24 lbs active) per acre per growing cycle. Minimum preharvest interval 0 days.
Barley, Oat, Rye, Wheat (Including Triticale)	Helminthosporium Leaf Spot, Leaf Rust, Septoria Glume Blotch, Septoria Leaf Spot, Tan Spot	1.6	Start application at onset of disease or when plants are in the tillering to jointing stage and repeat at 7- to 10-day intervals.	Do not make more than three applications during the season. Do not apply more than 4.8 qts (4.8 lbs active) per acre per crop. Do not apply within 26 days of harvest. PHI for barley, rye, and wheat is Feekes Growth Stage 10.5 (typically 35-45 days), but no less than 26 days. Do not graze livestock in treated areas prior to harvest.
Caprifig (Non-Food Use)	Endosepsis (Fusarium), Mold	3.2/100 gals	Prepare mamme figs by making a shallow cut through the eye and then hand dividing to avoid wasp injury. Submerge mamme figs in the continuously agitated suspension for at least 15 minutes. Drain before placement in trees.	Use fresh dipping suspension after treating 4 to 5 batches of figs.
Corn (Sweet Corn for Fresh Use or Processing; Popcorn; and Sweet Corn for Seed Production, including Hybrid Seed)	Common Rust, Helminthosporium Leaf Blight, Gray Leaf Spot	1.2	Use sufficient water for thorough coverage. Start applications when disease first appears and repeat at 4- to 7-day intervals.	Do not apply within 7 days of harvest. Do not apply more than 18 qts (18 lbs active) per acre per crop east of the Mississippi and AR and LA. Do not apply more than 6 qts (6 lbs active) per acre per crop west of the Mississippi except AR and LA.
(Field and Field Corn for Hybrid Seed Production)				Do not apply within 40 days of harvest. Do not apply more than 12 qts (12 lbs active) per acre per crop.
Cranberry	Fruit Rot	2.4-4.8	Start applications at mid-bloom and repeat at 7- to 10-day intervals.	Do not apply within 30 days of harvest. Do not apply more than 14.4 qts (14.4 lbs active) per acre per season.
Cucumber	Anthracnose, Cercospora Leaf Spot, Downy Mildew, Gummy Stem Blight, Scab	1.6-2.4	Start applications when plants are in the two-leaf stage and repeat at 7- to 10-day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces.	Do not apply within 5 days of harvest. Do not apply more than 19.2 qts (19.2 lbs active) per acre per crop.
Fennel	Early Blight, Late Blight	1.6	Begin in plant beds at emergence. Repeat at 7- to 10-day intervals.	Do not apply within 14 days of harvest. Do not apply more than 12.8 qts (12.8 lbs active) per acre per crop. Do not graze livestock in treated areas.

CROP	DISEASES CONTROLLED	RATE OF MANZATE® FLOWABLE PER APPLICATION QTS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Grape (East of the Rocky Mountains)	Black Rot, Bunch Rot, Deadarm, Downy Mildew	1.2-3.2	Apply in sufficient water to provide thorough coverage starting when new shoots are 1/2 to 1 1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7- to 10-day intervals until fruit is set. For late season control of black rot, deadarm and downy mildew, the use of other approved and recommended fungicides is suggested.	Do not apply within 66 days of harvest. Do not apply more than 19.2 qts (19.2 lbs active) per acre per season.
Grape (West of the Rocky Mountains)	Black Rot, Bunch Rot, Deadarm, Downy Mildew	1.2-2	Apply in sufficient water to provide thorough coverage starting when new shoots are 1/2 to 1 1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7- to 10-day intervals until fruit is set. For late season control of black rot, deadarm and downy mildew, the use of other approved and recommended fungicides is suggested.	Do not apply within 66 days of harvest except in CA where no application can be made after bloom. Do not apply more than 6 qts (6 lbs active) per acre per season.
Melon Cantaloupe, Casaba, Crenshaw, Honeydew, Watermelon	Alternaria Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Cercospora Leaf Spot	1.6-2.4	Start applications when plants are in the two-leaf stage and repeat at 7- to 10-day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. Some varieties are sensitive to MANZATE® Flowable fungicide. Consult State Cooperative Extension Service Specialist prior to use.	Do not apply within 5 days of harvest. Do not apply more than 19.2 qts (19.2 lbs active) per acre per season.
Oat	(See Barley)			
Onion (Dry Bulb), Garlic, Shallot	Botrytis Leaf Blight, Downy Mildew, Neck Rot, Purple Blotch	2.4	Follow a protective spray schedule starting 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. Do not apply more than 24 qts (24 lbs active) per acre per crop.
	Smut	2.4	Apply 2.4 qts per acre as a furrow drench at time of planting onion seeds. Use 75 to 125 gallons of water per acre.	Do not use more than 2.4 qts active per acre (29,000 linear feet of furrow) with an 18 inch row spacing.
Papaya	Anthracnose (Colletotricum), Phytophthora Fruit Rot, Black Spot (Cercospora)	1.6-2.0 (minimum 50 gals per acre)	Begin at flowering; treat central column crown, blossom area and developing fruit. Repeat at 14- to 21-day intervals.	Do not use more than 37 lbs (28 lbs active) per acre per year, i.e. do not make more than 14 applications at the maximum use rate per year. Minimum pre-harvest interval 0 days.
Peanut	Ascochyta Web Blotch Cercospora Leaf Spot, Rust	0.8-1.6	Start application when disease first appears or is reported in area. Repeat sprays at 7- to 14-day intervals. Reduce sprays to a 7-day interval during humid weather.	Do not apply within 14 days of harvest. Do not use more than 12.8 qts (12.8 lbs active) per acre per crop. Do not feed treated vines to livestock.
Pear	(See Pomefruit)			

CROP	DISEASES CONTROLLED	RATE OF MANZATE® FLOWABLE PER APPLICATION QTS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Pome Fruit Apple, Pear, Crabapple, Quince	Rusts, Scab, Fabrea Leaf Spot	4.8 Maximum per acre use rate based on thorough coverage dilute sprays. Use 50 gal minimum per acre. Consult State Extension Service if necessary to adjust for variable tree size.	**Pre-Bloom/Bloom Use:** Begin application at 1/4 to 1/2 inch green tip and continue on a 7- to 10-day schedule through bloom. Use either the "Pre-Bloom/Bloom" or "Extended Application" schedule. **DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES**	Do not apply more than 4.8 qts (4.8 lbs active) per acre per application. Do not apply after bloom. Do not apply more than 19.2 qts (19.2 lbs active) per acre per year. Do not graze livestock in treated areas. It is recommended that this product be used in an Integrated Pest Management Program.
		2.4 Maximum per acre use rate based on thorough coverage dilute sprays. Use 50 gal minimum per acre. Consult State Extension Service if necessary to adjust for variable tree size.	**Extended Application Schedule or for Use in Tank Mixtures:** For implementation of IPM programs, applications based on tree-row volume, or for use as a resistance management tool; begin applications at 1/4 to 1/2 inch green tip and continue applications on a 7- to 10-day schedule through the second cover spray. Use either the "Pre-Bloom/Bloom" or "Extended Application" schedule. **DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES**	Do not apply more than 2.4 qts (2.4 lbs active) per acre per application. Do not apply within 77 days of harvest. Do not apply more than 16.8 qts (16.8 lbs active) per acre per year. Do not graze livestock in treated areas. It is recommended that this product be used in an Integrated Pest Management Program.
Potato	Early Blight, Late Blight, Black Dot **Disease Suppression:** Botrytis	0.4-1.6	Begin applications when plants are 4 to 6 inches high by applying 1 qt (1 lb active) per acre. As the vines increase in size, apply 1 to 1.6 qts per acre at intervals of 5- to 10-days or 0.4 qt per acre at 3 to 5 day intervals.	Do not apply more than 11.2 qts (11.2 lbs active) per acre per crop. Do not use within 3 days of harvest in CT, DE, FL, MA, ME, MI, NH, NY, OH, PA, RI, VT, WI, and within 14 days elsewhere. Vine-kill should occur 14 days before harvest. It is recommended that this product be used in an Integrated Pest Management Program.
Potato (Seedpiece Treatment)	Fusarium Decay, Seedborne Common Scab	1 per 50 gal	Dip whole or cut potato tubers in 1 qt MANZATE® Flowable fungicide per 50 gallons of water. Place treated tubers in a clean container following treatment and plant as soon as possible. Spread treated seedpieces in a cool place if held before planting.	Do not use treated seed potatoes for food or feed purposes. Seed-pieces that have been treated with this product that are then to be packaged or bagged for future use must contain the following labeling on the outside of the seed-piece package or bag: "When opening this bag or loading/pouring the treated seed-pieces, wear long-sleeved shirt, long pants, shoes, socks, chemical resistant gloves, and a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any R, P, or HE filter. Treated seed-pieces – Do Not Use for Food, Feed, or Oil Purposes." After the seed pieces have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seed pieces are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil/media subsurface.

CROP	DISEASES CONTROLLED	RATE OF MANZATE® FLOWABLE PER APPLICATION QTS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Squash (Summer Squash, Including Edible Gourd)	Downy Mildew	1.6-2.4	Start applications when plants are in the two-leaf stage and repeat at 7- to 10-day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces.	Do not apply within 5 days of harvest. Do not apply more than 19.2 qts (19.2 lbs active) per acre per crop.
Sugar Beet	Cercospora Leaf Spot	1.2-1.6	Begin when disease first threatens. Repeat at 7- to 10-day intervals.	Do not apply within 14 days of harvest. Do not apply more than 11.2 qts (11.2 lbs active) per acre per crop. Do not feed treated sugar beet tops to livestock.
Tomato (East of the Mississippi River)	Anthracnose, Early Blight, Gray Leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot	0.6-1.2	Start application when seedlings emerge or transplants are set. Repeat at 3- to 7-day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 16.8 qts (16.8 lbs active) per acre per crop.
		1.2-2.4	Start application when seedlings emerge or transplants are set. Repeat at 7- to 10-day intervals throughout the season.	
	Bacterial Speck and Spot	1.2-2.4	Start application when seedlings emerge or transplants are set. Repeat at 7- to 10-day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 16.8 qts (16.8 lbs active) per acre per crop. Use a full rate of a fixed copper fungicide in a tank mix combination with a half to full rate of MANZATE® Flowable. Follow the application interval as directed on the copper fungicide label.
Tomato (West of the Mississippi River)	Anthracnose, Early Blight, Gray Leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot	0.6-0.8	Start application when seedlings emerge or transplants are set. Repeat at 3- to 7-day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 6.4 qts (6.4 lbs active) per acre per crop.
		1.2-1.6	Start application when seedlings emerge or transplants are set. Repeat at 7- to 10-day intervals throughout the season.	
	Bacterial Speck and Spot	1.2-1.6	Start application when seedlings emerge or transplants are set. Repeat at 7- to 10-day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 6.4 qts (6.4 lbs active) per acre per crop. Use a full rate of a fixed copper fungicide in a tank mix combination with a half to full rate of MANZATE® Flowable. Follow the application interval as directed on the copper fungicide label.
Watermelon	(See Melon)			
Wheat (Including Triticale)	(See Barley)			

SEED TREATMENTS
For Commercial Seed Treatment Only

A single application for commercial seed treatment may be made on crops which have registered EBDC seed treatment uses.

For best results, the seed must be completely and uniformly covered with fungicide. For seed treatment, a dye must be added to the Manzate Flowable treating slurry which will impart an unnatural color to the seed.

For commercial seed treatments, seeds should be clean and well-cured prior to treatment. Apply to dry seed with conventional slurry or mist seed treating equipment. Refer to the Non-Agricultural Use Requirements box for commercial treatments.

Seeds that have been treated with this product that are then to be packaged or bagged for future use must contain the following labeling on the outside of the seed package or bag:

"When opening this bag or loading/pouring the treated seeds, wear long-sleeved shirt, long pants, shoes, socks, chemical resistant gloves, and a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any R, P, or HE filter.

Treated seed – Do Not Use for Food, Feed, or Oil Purposes."

After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seeds are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil/media subsurface.

		SEED TREATMENT RATE-APPLY AS A SLURRY FLUID OZ./BU.		FLUID OZS./100 LBS.	
CROP	**DISEASES**	**CA**	**All States Except CA**	**CA**	**All states except CA**
Barley	Bunt, Covered Smut, Damping-Off, Fake Loose Smut, Seed Decay, Seedling Blights	2.2	2-3.2	4.5	4.3-6.7
Corn	Damping-Off, Seed Rot, Seedling Blights	2.5	2.4-4.8	4.5	4.3-8.6
Cotton Acid Delinted	Damping-Off, Seedling Blights	Do Not Use	Do Not Use	5.1	4.8-5.1
Cotton Reginned	Damping-Off, Seedling Blights	Do Not Use	Do Not Use	10.1	9.5-10.1
Flax	Seed Decay, Seedling Blights, Damping-Off	3.4	3.2-6.4	6.1	5.7-11.3
Oat	Damping-Off, Seedling Blights, Seed Decay, Smuts	2.2	2-3.2	6.7	6.4-10
Peanut (Shelled)	Damping-Off, Seed Rots,	Seedling Blights	Do Not Use	3.2-6.4	Do Not Use
12.8-25.6	Rice	Achyla, Other Soil and Seedborne Fungi Causing Seed	Rot and Reduced Seedling Vigor	Do Not Use	
Do Not Use	3.4-6.7 (of dry rice seed) (2.1-4.2 qts/ton of seed)	Apply before, during or after	soaking in water.	Rye	Bunt, Covered Smut, Damping-Off, Seed
Decay, Seedling Blights	2.2	2-3.2	4.0	3.7-5.7	Safflower
Puccinia cartha-mi	(Which Causes Foot-and-Rot Discase and Foliage Rust Disease)	Do Not Use	Do Not Use	3.4	3.2-3.4
Sorghum	Covered Kernel Smut, Damping-Off, Seedling Blights, Seed Rots	2.5	2.4-4	5.1	4.3-7.2
Tomato	Damping-Off, Seedling Blights, Seed Rots	Do Not Use	Do Not Use	13.5	12.8-13.5

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Important--Keep in a cool place but not below 32°F. Temperature extremes will affect quality of MANZATE® Flowable. Store product in original container only, away from other pesticides, fertilizer, food or feed.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying.

[for containers less than 5 gallons] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[for containers greater than 5 gallons] Triple rinse [or pressure rinse] as follows:

Triple rinse: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container back on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not cut or weld metal containers.

Pressure rinse: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

ATTENTION: This product contains mancozeb and ETU, chemicals known to the State of California to cause cancer in laboratory animals. ETU is also known to the State of California to cause birth defects or other reproductive harm in laboratory animals.

IMPORTANT INFORMATION
READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UNITED PHOSPHORUS, INC. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, United Phosphorus, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UNITED PHOSPHORUS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

United Phosphorus, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of United Phosphorus, Inc.

Manzate is a registered trademark of United Phosphorus, Inc.
© 2010 United Phosphorus, Inc. All rights reserved.

A01398419 70506-236(110310-3813)