CITRUS FRUITS (NOT FOR USE IN MISSISSIPPI) - APHIDS, ETC.

General Information

Whirlwind is an emulsifiable concentrate for use in listed crops. Target pests and application rates are provided in the accompanying tables.

The label booklet is not valid for use of this product in the state of Mississippi. For use in the state of Mississippi, refer to Whirlwind supplemental labeling entitled “Use Directions for the State of Mississippi.”

General Use Precautions

Insect control may be reduced at low spray volumes under high temperature and wind conditions.

Some reduction in insect control may occur under unusually cool conditions.

Flood irrigation: To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours following a soil surface or foliar application of Whirlwind.

Application Guidelines

BROADCAST FOLIAR APPLICATION

Apply with conventional power-operated spray equipment using nozzles and spray pressures recommended for insecticides. Apply Whirlwind in a spray volume of not less than 2 gallons per acre for aerial application equipment (fixed-wing or helicopter) or not less than 10 gallons per acre for ground equipment, unless otherwise specified. Increase spray volume to ensure adequate coverage with increased density and height of crop canopy. See Spray Drift Precautions section for recommendations on droplet size.
GROUND APPLICATION: Orient the boom and nozzles so that uniform coverage is obtained. The swath width should not be wider than the boom. Follow nozzle manufacturer’s recommendations for insecticide nozzles with respect to nozzle type, pressure, and spacing.

BROADCAST SOIL APPLICATION

Apply with conventional power-operated spray equipment that will apply the product uniformly to the soil surface. Use nozzles that produce medium or coarse droplets (235-400 microns). Unless otherwise indicated, a spray volume of 10 gallons or more per acre is recommended. For band application, use proportionally less spray volume.

AERIAL APPLICATION

Use a minimum spray volume of 2 gallons per acre and follow recommendations for best management practices for aerial application, above.

Marking of swaths by flagging, permanent markers or use of GPS equipment is recommended.

CHEMIGATION (SPRINKLER IRRIGATION)

Whirlwind may be applied to the following crops through sprinkler irrigation equipment: alfalfa, almond (orchard floors only), citrus (orchard floors only), corn (field and sweet), cotton, cranberry, mint, sorghum, soybeans, sugarbeet, orchard floors (pecan and walnut), walnut (orchard floors only), and wheat, or other crops as specified in supplemental labeling. Do not apply this product by chemigation unless specified in crop-specific directions in the label or Dow AgroSciences supplemental labeling. Do not apply to labeled crops through any other type of irrigation system.

Note: Unless otherwise indicated in specific use directions, the application rates for chemigation are the same as those recommended for broadcast application.

Special Use Directions for Sprinkler Irrigation

The following use directions must be followed when Whirlwind is applied through sprinkler irrigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues, and dispose of the residues according to state and federal laws. Flush the injector with soap and water. Determine the amount of
Whirlwind needed to cover the desired acreage. Mix according to instructions in the Mixing Directions section and bring mixture to desired volume. Do not add crop oil when Whirlwind is applied by chemigation. Maintain continuous agitation during mixing and throughout the application period. Set the sprinkler system to deliver the desired inches of water per acre. Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injector system according to Calibration instructions in the following Special Use Precautions section. The mixture containing Whirlwind must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving to ensure uniform application at the correct rate. When the application is finished, flush and clean the entire irrigation and injector system prior to shutting down the system.

Limitations, Restrictions, and Exceptions

Apply as a concentrate or dilute spray using conventional, power-operated spray equipment. Use a higher rate in rate range when there is increased pest pressure. Use sufficient water to ensure thorough and complete coverage of the foliage and fruit. For dilute sprays (greater than 200 gpa), use a spray concentration of at least 0.5 pints of Whirlwind per 100 gallons of finished spray. Complete coverage is not necessary for outside canopy sprays targeting certain pests such as lepidoptera insects and katydids. Treat when pests become a problem or in accordance with the local spray schedule as recommended by your State Agricultural Experiment Station, certified Pest Control Advisor, or Extension Service Specialist. To avoid excessive ridging, do not apply Whirlwind to citrus from December up to the initiation of bloom.

Use of Spray Oils: To improve control of aphids, mealybugs, scale insects, and thrips, a petroleum spray oil recommended for use on citrus trees may be added to spray mixtures at up to 1.8 gallons per 100 gallons of spray.

Pest-Specific Use Directions:

1. Lubber grasshoppers: Effective control requires direct contact with spray when grasshoppers are small (less than 1 inch in length).

Specific Use Precautions:

- Observe local recommendations for tank-mix combinations especially with regard
to use of Whirlwind with spray oil. Consult with a county farm advisor, county agency, extension service personnel, agricultural commissioner, pest control advisor, or local Dow AgroSciences representative for local recommendations.

- Do not apply when trees are stressed by drought or high temperatures.

- Whirlwind is highly toxic to bees exposed to direct treatment and should not be applied when bees are actively visiting the area. During the citrus bloom period in California, apply from 1 hour after sunset until 2 hours before sunrise.

- Additional Precautions for California and Arizona: Whirlwind should not be used in combination with spray oil when temperatures are expected to exceed 95°F the day of application or for several consecutive days thereafter.

Specific Use Restrictions:

- Preharvest Interval: Do not treat within 21 days of harvest for applications of up to 7 pints of Whirlwind per acre or within 35 days for application of rates above 7 pints per acre.

- The use of application rates greater than 8 pints of Whirlwind (4 lb ai chlorpyrifos) per acre are allowed only in the following counties in California: Fresno, Tulare, Kern, Kings, Stanislaus, and Madera.

- Do not apply more than 15 pints of Whirlwind (7.5 lb ai chlorpyrifos) per acre per year.

- Do not make more than 2 applications of Whirlwind or other products containing chlorpyrifos per year (does not include citrus orchard floors).

- Do not make second foliar application of Whirlwind or other product containing chlorpyrifos within 30 days of the first application.

- Do not allow meat or dairy animals to graze in treated areas.

Method

Concentrate Spray

Dilute Spray

Rates
Restricted Entry Interval

5 days

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

when pests become a problem