FRUIT AND NUT CROPS: PECAN - CONTROL OF BLACK PECAN APHID, FALL WEBWORM, ETC.

General Information

USE PRECAUTIONS

Read all precautions and directions before using. Apply this product only as specified on this label. Use in residential, park, or recreational areas is prohibited. Imidan 70-W is compatible with most commonly used insecticides and fungicides, but is incompatible with alkaline materials such as spray lime, lime sulfur, and Bordeaux mixtures. These materials will reduce the insecticidal activity of Imidan 70-W.

Insecticidal activity may also be reduced when the spray solution has a pH of 6 or higher. The pH of the spray solution must be corrected by the addition of a suitable buffering or acidifying agent for optimum insecticidal activity.

SPRAY DRIFT MANAGEMENT
Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals. Avoiding spray drift is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making applications.

For overhead chemigation:
Apply only when wind speed is 3-10 mph.

For ground boom applications:
Apply with nozzle height no more than 2 feet above the ground or crop canopy, and when the wind speed is 3-10 mph at the application site as measured by an anemometer. Use a coarse or coarser spray (ASABE definition S572) for standard nozzles, or a volume mean diameter (VMD) of 385 microns or greater for spinning atomizer nozzles.

For airblast applications:
Do not direct spray above trees and vines, and turn off outward pointing nozzles at row ends and when spraying the outer 2 rows. Apply only when the wind speed is 3-10 mph at the application site as measured by an anemometer.

For aerial applications:
If the application includes a no-spray buffer zone, do not release spray at a height greater than 10 feet above the ground or crop canopy. Apply only when the wind speed is 3-10 mph. Use a coarse or coarser spray (ASABE definition S572) for standard nozzles, or a volume mean diameter (VMD) of 385 microns or greater for spinning atomizer nozzles. Aerial applicators must consider flight speed and nozzle orientation in determining droplet size. The boom width must not exceed 75% of the wingspan or 90% of the rotary blade. When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

The applicator also must use all other measures to control drift.

SPRAY DRIFT RESTRICTIONS
Do not apply this product in a manner inconsistent with the Best Management Practices summarized below:

1. Use the largest drop size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.
2. For aerial applications, release spray at the lowest height consistent with efficacy and flight safety. For applications other than those on potatoes, if the application site is within 50 feet of a permanent water body, do not release spray at a height greater than 10 feet above the ground or crop canopy. For applications to potatoes, if the application site is within 150 feet of a permanent water body, do not release spray at a height greater than 10 feet above the ground or crop canopy.
3. For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.
4. Make aerial or ground applications when the wind velocity favors on-target product deposition. Apply only when the wind speed is 3 to 10 mph. For all non-

aerial applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.
5. Do not make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
6. Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.
7. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
8. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.
9. For ground-boom, chemigation, orchard or other airblast applications, do not apply within 25 feet of permanent water bodies (rivers, natural ponds, lakes, streams, reservoirs, marches, estuaries, or commercial fish ponds).
10. For aerial application to crops other than potatoes, do not apply within 50 feet of permanent water bodies. For aerial applications to potatoes, do not apply within 150 feet of permanent water bodies.

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.

Not for use in residential areas. Use in park or recreational areas is prohibited.

DILUTION DIRECTIONS

The rate required for thorough, uniform coverage varies with plant growth at time of application. Apply recommended rate in adequate spray volumes to provide complete coverage of fruit and foliage.

- For aerial applications, apply in a minimum of 2 gals of water per acre for field and row crops, and a minimum of 5 gals of water per acre for tree and vine crops unless otherwise specified in the recommendation for a specific crop.

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: Sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move). Do not apply this product through any other type of irrigation system.

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

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.

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

For Chemigation Systems

Connected to Public Water Systems

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.

Do not apply Imidan 70-W through any irrigation system supplied by a public water system unless the water supplied from the public water system is 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. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

In addition, all directions and requirements specified for Sprinkler Irrigation Systems must be followed.

Sprinkler Irrigation Systems
The system must contain a functional check valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Center pivot, motorized lateral move, or traveling gun types of equipment: Inject into the system for one revolution or run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until Imidan 70-W has been cleared from the last sprinkler head. Do not use end guns. The system should be run at maximum speed for a foliar application.

Wheel move, side roll, end tow, solid set, or hand move types of equipment: Adjust

equipment to inject Imidan 70-W over a 30-60 minute period. Shut off injection equipment. Continue to operate irrigation system until Imidan 70-W has been cleared from the last sprinkler head. Imidan 70-W can be injected at the end of the irrigation cycle or as a separate application. Do not use end guns. Imidan 70-W must be premixed in a supply tank with water and other appropriate tank-mix chemicals. Agitation is necessary at all times.

Caution must be exercised in irrigation waters with a pH greater than 7. If the irrigation cycle will last longer than 8 hours and the Imidan 70-W is premixed in the supply tank, the tank mix must be buffered to a pH of 5.5 or lower. Please contact your Gowan sales representative should this situation apply. Application should be in sufficient water and of sufficient duration to apply the recommended rate evenly over the entire treated area.

No field runoff can be permitted during chemigation.

RESISTANCE MANAGEMENT
Imidan 70-W contains a Group 1B insecticide. Insect/mite biotypes with acquired resistance to Group 1B may eventually dominate the insect/mite population if Group 1B insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Imidan 70-W or other Group 1B insecticides.

To delay insecticide resistance consider:
- Avoiding the consecutive use of Imidan 70-W or other group 1B insecticides that have a similar target site of action, on the same insect/mite species.
- Using tank-mixtures or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide use on comprehensive IPM program.
- Monitoring treated insect/mite populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.
- For further information or to report suspected resistance, you may contact Gowan Company at toll free 1-800-883-1844.

USE LIMITATIONS

Do not exceed the maximum rate of phosmet per acre or the time limitations specified for the individual crops.

Use in residential, park, or recreational areas is prohibited. Imidan 70-W is only for use in commercial agricultural crops and areas as listed. Do not apply to forests or natural fallow or wooded areas.

USE RECOMMENDATIONS

FRUIT AND NUT CROPS
DORMANT SPRAYS: Imidan 70-W may be used during dormancy to control specified insects listed in each crop grouping which may overwinter on the tree and vine crops. Imidan 70-W may be used in combination with spray oils; always follow spray oil manufacturer's label recommendations.

Pruning must occur before any dormant treatments of Phosmet.

SPLIT APPLICATION SPRAYS: Applications to tree fruits and nuts may be made using a split application spray schedule. See crop for more specific application directions (if applicable).

The split application method may be used to improve efficacy and, in the case of nut crops, to time insecticide applications at the onset of hullsplit of different maturing varieties that may be present within a single orchard. Check with your local agricultural advisor, State Cooperative Extension Service or regional Gowan Company representative for recommendations.

Limitations, Restrictions, and Exceptions

PECAN

RATES
2 – 3 1/8 (1.4 – 2 lbs ai) (or 1 lb per 100 gals not to exceed 3 1/8 lbs product or 2 lbs ai per acre)

COMMENTS
For heavy insect infestations, use higher dosage rates. Check with your local Extension Service for recommended use rates in your area. Apply in sufficient water for complete coverage when infestations start. Repeat applications as necessary in accordance with insect infestations and local and State spray programs. For low to

moderate populations of pecan weevil, use 3 1/8 lbs (2 lbs ai) per acre and repeat application at 7 day intervals.

Fall Webworm, Pecan Weevil, Southern Green Stink Bug - Adequate control may not be achieved when heavy populations are present.

- Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days.
- Do not apply more than 10 lbs Imidan 70-W (7 lbs ai) per acre per year.
- Do not prune for 7 days following an application of Imidan 70-W.
- Nuts must be harvested mechanically.
- Do not graze or feed livestock on cover crops grown in treated pecan groves.
- Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area.

Method
Broadcast/Foliar Air
Broadcast/Foliar Ground
Pre-Harvest Interval

14 days

Rates
field_rates 0
field_rates 1

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Restricted Entry Interval

3 days

Timings
When infestation starts.