SWEET CORN - CORN (DUSKY) SAP BEETLE

General Information

COMPATIBILITY/TANK MIXING
ASSAIL 70WP Insecticide, when diluted with an equal volume of water, is physically compatible with a wide range of commonly used spray products, but the full range of compatibilities under local conditions is not known. Therefore, it is essential that before using ASSAIL 70WP Insecticide in any tank mixture the compatibility of the mixture be established. Add a small amount of this product to an equal volume of water in a small container and then add the other pesticide or spray product and mix thoroughly. DO NOT USE MIXTURES THAT CURDLE, PRECIPITATE, OR GREASE. FOR BEST RESULTS, SPRAY MIXTURES SHOULD BE USED IMMEDIATELY AFTER MIXING WITH ADEQUATE AGITATION. It is the pesticide user’s responsibility to ensure that all products in a tank mix are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products of the mixture (for example, first aid from one product, spray drift management from another).

Special Instructions for Tank Mixing ASSAIL 70WP Insecticide
When tank mixing ASSAIL 70WP Insecticide with other products, introduce the products into the tank in the following order: (1) water soluble packets (2) wettable powders (such as ASSAIL 70WP Insecticide) (3) water dispersable granules (4) flowable liquids (5) emulsifiable concentrates and (6) adjuvants and/or oils (do not use stickers). Always allow each product to fully disperse before adding the next product.

DIRECTIONS FOR CHEMIGATION

Instructions

For chemigation use only on cranberries and on potatoes after foliage has emerged and only through overhead sprinkler irrigation systems.

Apply this product only through overhead sprinkler irrigation systems including center pivot, lateral move, side (wheel) roll, solid set, or hand move irrigation systems after potato foliage has emerged. 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 non-uniform distribution of treated water. 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. The overhead sprinkler chemigation 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 back flow. 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 for materials that are compatible with pesticides and capable of being fitted with a system interlock.

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. 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. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) of 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 flow 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. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection. 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. 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. 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.

Application Instructions
Observe the requirements in the System Requirements section above. Apply ASSAIL 70WP Insecticide only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off. Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time. Application of more than recommended quantities of irrigation water per acre may result in decreased product performance. Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/ injection unit to prevent spray being applied to this area. Use of end guns which deliver uneven distribution of water is not recommended. Where sprinkler distribution patterns do not overlap sufficiently, unacceptable insect control may result. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. ASSAIL 70WP Insecticide may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous
ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

Spray Preparation
Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water. Prepare a solution of ASSAIL 70WP Insecticide in a mix tank. Fill the tank with 1/2 or 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of ASSAIL 70WP Insecticide and then the remaining volume of water.

Sprinkler Irrigation
Observe all System Requirements and Application Instructions above. Set sprinkler system to deliver a maximum of 0.2 inch of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the solution of ASSAIL 70WP Insecticide into the irrigation water line so as to deliver the desired rate per acre. The solution of ASSAIL 70WP Insecticide should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. Retention of ASSAIL 70WP Insecticide on foliage is necessary for optimum activity. Do not apply when wind speed favors drift beyond the area intended for treatment. Where sprinkler distributed patterns do not overlap sufficiently, unacceptable insect control may result.

DIRECTIONS FOR AERIAL OR GROUND SPRAY APPLICATION

APPLICATION TIMING
Begin application when insect populations reach recognized economic threshold levels. Consult the Cooperative Extension Service, Professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.
INFORMATION
ASSAIL 70WP Insecticide is a 70% wettable powder for the control of many sucking and chewing insects on the crops listed in this label. The active ingredient in ASSAIL 70WP Insecticide is acetamiprid, a neonicotinoid insecticide that controls target insects through contact and ingestion. ASSAIL 70WP Insecticide is rapidly absorbed by the plant tissue and quickly moves via systemic translaminar activity to protect the entire leaf. However, thorough spray coverage is essential for optimal performance. ASSAIL 70WP Insecticide is rainfast once the spray solution has dried.

MIXING INSTRUCTIONS

Mixing and Application Instructions for ASSAIL 70WP Insecticide
ASSAIL 70WP Insecticide is a dry powder formulation that readily disperses in water to form a spray, which may be applied by ground or air.

1. Plan ahead. Prepare only enough spray mixture as can be applied on the day of mixing.

2. Fill tank 1/4 - 1/2 full with the required amount of total spray volume of water.

3. Begin agitation and add product. The jug should be given a good hard shake to fluff the product before measuring. When pouring into the measuring cone, do not tamp down. The cone is calibrated for the fluffed product.

4. Continue to fill tank while directing a stream of water onto any floating product.

5. Allow mixing in tank for 2 minutes after filling or until thoroughly mixed before applying.

6. Maintain continuous agitation during mixing and application to assure uniform suspension. If mixture sits without agitation for extended periods, agitate the mixture for at least 10 minutes before use.

7. Equip spray system with a 50-mesh inline filter, which will protect nozzles that are typically used. Nozzles may also be equipped with 50-mesh nozzle filters or 25 to 50 mesh (equivalent) slotted nozzle filters.
8. ASSAIL 70WP Insecticide is unstable in water pH below 4 and above 9. If necessary, buffer water to obtain optimum pH range.

APPLICATION INSTRUCTIONS

ROW CROPS

Apply a minimum finished spray volume of 5 gallons per acre by air or 15 gallons per acre by ground unless otherwise directed under crop specific directions. For best results, it is important to obtain thorough and uniform spray coverage of the plant. For aerial application, select nozzles and pressure that deliver MEDIUM spray droplets as indicated in nozzle manufacturer’s catalogs and in accordance with ASABE Standard S-572. The use of spray adjuvants, such as high quality non-ionic or silicone surfactants or methylated seed oils is recommended to enhance coverage and plant uptake and may improve pest control in certain crops. Please see specific crop use directions. The addition of an adjuvant is recommended for all applications made to vegetables (except legumes) and to cotton when controlling whiteflies. The use of stickers is not recommended. Some adjuvants can cause adverse affects, such as spotting or burn to fruit or foliage. Select an adjuvant that will be safe for the target crop. Follow adjuvant use directions. Consult your local Extension Service, Crop Advisor or United Phosphorus, Inc. representative for additional information. Use higher dosage rates for heavy infestations or dense foliage. The specific length of residual control depends on environmental factors, plant growth, dosage rate, and degree of insect infestation. For foliar banded applications, determine the amount of chemical to use per acre by dividing the band width by the row width and multiplying by the appropriate broadcast rate.

To clean the sprayer after use, drain and flush with water. Use rinsate on crop according to label instructions or dispose of in an approved manner (See STORAGE AND DISPOSAL).

ORCHARD CROPS

To achieve optimum pest control, it is important to obtain thorough and uniform spray coverage. Choose a finished spray volume appropriate for the size of tree or vine and amount of foliage which will provide thorough coverage throughout the canopy. For certain pests, also follow recommendations listed under crop specific directions. For aerial application, select nozzles and pressure that deliver MEDIUM spray droplets as indicated in nozzle manufacturer’s catalogs and in accordance
with ASABE Standard S-572. Aerial applications may not provide as thorough coverage as ground applications.

The use of spray adjuvants, such as high quality non-ionic surfactants, methylated seed or horticultural oils is recommended to enhance coverage and plant uptake and may improve pest control. The addition of an adjuvant is recommended for all applications to pome fruit when controlling codling moth, oriental fruit moth, and San Jose scale. The use of stickers is not recommended. Some adjuvants can cause adverse effects, such as spotting or burn to fruit or foliage. Select an adjuvant that will be safe to the target crop. Follow adjuvant use directions. Consult your local Extension Service, Crop Advisor or United Phosphorus, Inc. representative for additional information.

Use higher dosage rates within the listed rate range for heavy infestations or dense foliage. The specific length of residual control depends on environmental factors, plant growth, dosage rate, and degree of insect infestation.

To clean the sprayer after use, drain and flush with water. Use rinsate on crop according to label instructions or dispose of in an approved manner (See STORAGE AND DISPOSAL).

INTEGRATED PEST MANAGEMENT (IPM) USE OF THIS PRODUCT
ASSAIL 70WP Insecticide has ovicidal, larvicidal, or adulticidal activity against many pests which can be effectively utilized in IPM programs. Control of important pests coupled with retention of beneficial insects and spiders can offer significant benefits to those producers utilizing integrated pest management programs.

RESISTANCE MANAGEMENT
Acetamiprid is the active ingredient in ASSAIL 70WP Insecticide. It is a member of a class of chemicals known as neonicotinoids and within the mode of action Group 4A. Rotating ASSAIL 70WP Insecticide with insecticides with a different mode of action (other than Group 4A insecticides) may delay or prevent development of resistance and cross-resistance to ASSAIL 70WP and other Group 4A insecticides. Avoid making more than two (2) consecutive applications of ASSAIL 70WP Insecticide before rotating to an alternative mode of action insecticide. Foliar applications of ASSAIL 70WP Insecticide should be avoided on crops treated with a Group 4A seed treatment or soil-applied insecticide until a foliar application of a non-Group 4A insecticide (insecticide with a different mode of action) has been applied between
these applications. The use of ASSAIL 70WP Insecticide should conform to the resistance management guidelines established in your area. Consult your agricultural advisor, PCA, university or extension personnel for recommended pest and resistance management practices for your area. Use recommended IPM practices in your pest management system. Use of rates below the minimum rate listed for each particular insect pest may enhance the development of resistance and should be avoided.

To prevent development of insect resistance, do not apply ASSAIL 70WP Insecticide to crops listed on this label when grown in a greenhouse.

Limitations, Restrictions, and Exceptions

SWEET CORN

SPRAY VOLUME FOR SWEET CORN: Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground.

Begin applications when treatment thresholds have been reached.

Thorough coverage is important to obtain optimum control.

USE DIRECTIONS

Apply up to 2 applications on a 14 day spray interval. Do not apply at this rate less than 7 days before harvest (PHI = 7 days).

RESTRICTIONS: Sweet Corn

- Do not exceed a total of 0.21 lb. active ingredient (4.8 ozs. product) per acre per calendar year.
- Do not make more than two (2) applications at the 2.3 ozs. product rate per calendar year or more than four (4) applications at the 1.2 ozs. product rate per calendar year.

Method

Broadcast/Foliar Air
Broadcast/Foliar Ground
Pre-Harvest Interval
7 days

Rates

- field_rates 0
- field_rates 1

Restricted Entry Interval

12 hours

Timings

When insect populations reach recognized economic threshold levels.