BANANAS AND PLANTAINS (PUERTO RICO ONLY) - SPOT GUN APPLICATION

General Information

PRODUCT INFORMATION

VYDATE L is a water-soluble liquid that can be used to control many important insects, mites, and nematodes. VYDATE L is diluted with water for application.

Use VYDATE L for nematode suppression where nematode populations are low to moderate. Make applications via foliar spray, drip irrigation, shank or other soil injection system, soil surface band followed immediately by overhead irrigation, or via sprinkler chemigation. For best results on nematodes use a registered soil fumigant or contact nematicide prior to or at planting for most crops. VYDATE L application timing and treatment schedules depend on the crop and life cycle of the nematode. See the specific crop directions for use of this label for more information.

Use only in commercial and farm plantings. Not for use in home plantings. Not for use during any period after a commercial crop site is opened for public entry as a “u-pick”, “pick your Own” or similar operation; in no case shall preharvest applications be made after first public entry. The restricted entry interval stated elsewhere on this label must be followed.

Do not formulate this product into other End-use products.


In the Directions for use section of this label for NON-BEARING FRUIT, CARROTS, CELERY, CUCUMBER, CANTALOUPE, HONEYDEW MELON, WATERMELON, SQUASH, PUMPKIN, EGGPLANT, PEPPERS, AND TOMATOES, the Rio Grande Valley is defined to include the following counties: Brewster, Crane, Crockett, Culberson, El Paso, Hudspeth, Jeff Davis, Kinney, Loving, Maverick, Pecos, Presidio, Reeves, Starr, Sutton, Terrell, Upton, Val Verde, Ward, Webb, Winkler, and Zapata.

Seed piece treatments of tuberous crops are prohibited.

All applications to the soil must be incorporated immediately after application to a
depth of at least 2 inches by mechanical means or by water. Place VYDATE L in the root zone of the plant for best results. If irrigation is used to water in the application, use sufficient water to move the applied VYDATE L at least 2 inches deep into the soil. However, do not apply irrigation water such that the water moves off the field.

INTEGRATED PEST MANAGEMENT

Dupont supports the use of Integrated pest management (IPM) programs to control pests. Use this product as part of an IPM program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, rotation of insecticides with different modes-of-action, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

SCOUTING

Monitor insect populations to determine whether or not there is a need for an application of Dupont™ VYDATE L based on locally determined pest management guidelines. If permitted by the label, more than one treatment of VYDATE L may be required to control a population of pests.

INSECT RESISTANCE MANAGEMENT

For resistance management, VYDATE L is a group 1a insecticide. Repeated exclusive use of VYDATE L or other group 1a insecticides may lead to the buildup of resistant strains of insects in some crops. Not all members of this group have been shown to be cross-resistant. Different resistance mechanisms that are not linked to target site of action, such as enhanced metabolism, are common for this group of chemicals. Alternation of compounds from different sub-groups within this group is an acceptable part of an integrated pest management program.

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, use this product as part of resistant management strategies established for the use area.
These strategies include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

Unless directed otherwise in the specific crop/pest sections of this label, the best practices are to follow these instructions to delay the development of insecticide resistance:
- Avoid using the same mode of action (same IRAC number and subgroup) on consecutive generations of insect pests.
- Rotate the use of VYDATE L or other group 1a insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Avoid using less than the labeled rates of VYDATE L when applied alone or in tank mixtures.
- Target the most susceptible insect life stages, whenever possible.
- Monitor insect populations for product effectiveness. If resistance to VYDATE L develops in your area, VYDATE L, or other products with a similar mode of action, may not provide adequate control.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or IPM recommendations for the specific site and pest problems in your area.
- If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local Dupont Crop protection company representative or agricultural advisor for the best alternate method of control.

For additional information on insect resistance monitoring, visit the Insecticide resistance action Committee (IRAC) on the web at http://www.irac-online.org.

CROP ROTATION

Do not plant crops other than those with registered VYDATE L or VYDATE C-IV uses within 4 months after the last application. Cover crops for soil building or erosion control may be planted anytime, but do not graze or harvest for food or feed.
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apply at the labeled rates when insect populations reach locally determined thresholds. Consult the cooperative extension service, professional consultant or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Refer to crop specific directions for use in the crop tables for information on treatment intervals.

Use sufficient water to obtain thorough, uniform coverage. For aerial applications use a minimum of 2 gallons per acre of water for vegetables and row crops and 10 gallons per acre of water for fruit crops, except where otherwise noted in the crop specific directions for use. For ground foliar applications use a minimum of 5 gallons per acre of water and 10 gallons per acre of water for fruit crops, except as otherwise noted in the crop specific directions for use.

CHEMIGATION

Use the following types of irrigation equipment for chemigation applications: center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, mini (micro) sprinkler, hand move, drip (trickle), or strip tubing irrigation systems. To avoid exposure to birds, use drip irrigation where feasible. Do not apply this product through any other type of irrigation system.

Apply in sufficient water and of sufficient duration to apply the labeled rate evenly to the entire treated area.

Buffer the injection solution containing Dupont VYDATE L to approximately pH 5 for best results.

Do not allow irrigation water to collect or run-off during chemigation.

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

Do not apply Dupont VYDATE L at the same time that a drip/irrigation line clean out product is being used as performance may be reduced.
Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform 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.

Wear personal protective equipment as defined in the PPE section of the label for applicators and other handlers when making adjustments or repairs on the chemigation system when VYDATE L is in the irrigation water.

When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system.

Use a pesticide supply tank for the application of VYDATE L in chemigation systems. Buffer highly alkaline water so that the pH of the spray solution is in the range of neutral to slightly acidic.

Do not connect any irrigation system (including greenhouse systems) used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices 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 at least 60 days out of the year.

REQUIRED SYSTEM SAFETY DEVICES

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. 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.

SPRINKLER CHEMIGATION

1. End guns must be turned off during the application, if they irrigate non target areas.

2. It is recommended that nozzles in the immediate area of control panels, chemical supply tanks and system safety devices be plugged to prevent contamination of these areas.

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

4. Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.

DRIP (TRICKLE) CHEMIGATION

1. The system should provide uniform waterflow and should have no leaks.

2. Irrigate crop in a manner to wet the root zone first, then introduce VYDATE L for a period to distribute the material uniformly to the crop being irrigated. Discontinue
use of VYDATE L long enough to purge the system with fresh water and allow the VYDATE L to remain in the root zone of the crop.

See crops on label for treatment rates and additional use information.

POSTING OF AREAS TO BE TREATED

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in ENGLISH. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. at the top of the sign shall be the words “KEEP OUT”, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word “STOP”. Below the symbol shall be the words “PESTICIDE IN IRRIGATION WATER”.

Posting required for chemigation does not replace other posting and reentry requirements for farm worker safety.

Limitations, Restrictions, and Exceptions

SPECIFIC USES – FRUITS
Where not otherwise specified, apply Dupont VYDATE L in sufficient water to obtain uniform coverage.

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Application Rate

Spot Gun:

Planting Treatment: 5 to 10 ml undiluted VYDATE L/corm (or “seed”) in the planting hole.

Post-planting Treatment as Extension of Planting Treatment: 5 to 10 ml undiluted VYDATE L/corm.

Application Timing and Method

Spot Gun Treatments:

Apply using a spot gun applicator with a coarse spray nozzle.

Apply and cover the treated corm with soil. Two to three months after planting, repeat the application at the same rate. If the developing pseudostem is 1 ft tall or shorter, apply the pesticide directly over the top, wetting the leaves and leaf axils; if the pseudostem is higher, apply the pesticide to the soil in a semicircular pattern, directing the product as close as possible to the developing pseudostem. For high infestations, use a high rate and shorten the interval between applications.

At 3 to 4 month intervals, reapply the product using the same application regimen as in the 2 to 3 month regimen.

When a sucker or “follower” has been selected for the production of the ratoon crop, apply the product to the selected sucker at the same rate and frequency.

Further Use Information

- Do not apply more than 16 pt (2 gal) Dupont VYDATE L per acre per year.
- Minimum retreatment interval is 21 days unless a longer interval is stated in the application Timing and method section.
- Do not apply more than 4 applications per season.
- Do not use VYDATE L with heavy infestations of nematodes.
- VYDATE L is most effective when spot gun applications are made at the beginning of the rainy season, or when the soil moisture is adequate.
- Before making applications, remove weeds and leaf trash from the treatment area.
- Do not permit animals to graze or forage in treated areas.
- Spot gun: If applied to soil surface around pseudostem then incorporate product into soil by water or mechanical means.

Method
Spot Spray
Coarse spray
Spot Spray
Coarse spray

Pre-Harvest Interval
1 day

Rates
field_rates 0

Restricted Entry Interval
48 hours

Timings
At-Plant
Postplant