

DuPont™ Vydate® L insecticide/nematicide and Lannate® LV and SP insecticides

Brown Marmorated Stink Bug

Preserve the yield, quality and value of your crop.

In 2010, the brown marmorated stink bug (BMSB) emerged as a major threat to orchard crops, small fruits, grapes, vegetables, row crops, ornamentals and even homeowners.

DuPont™ Lannate® SP and Lannate® LV insecticides can be used to manage BMSB infestations in the mainland United States (in California and New York refer to the Section 2(ee) Recommendations¹) on certain fruit, vegetable and grain crops. Additionally, Section 2(ee) recommendations allow DuPont™ Vydate® L insecticide/nematicide to be used for BMSB control in 19 states on certain fruit and vegetable crops.² While the current product label for Vydate® L does not include BMSB on the list of pests controlled, the 2(ee) recommendation provides growers with guidelines for using Vydate® L to control BMSB populations.

Threat to your crops

BMSB was imported to the United States from Asia and was first detected in Pennsylvania in 1998. Because BMSB has few natural predators and many plant hosts, populations have climbed exponentially. Both immature and adult BMSB feed on a broad range of fruit, vegetable and grain crops, causing significant yield loss and damage that potentially renders crops unmarketable as fresh produce.

In 2010, for example, BMSB damage caused apple growers in affected areas to divert product from fresh markets to processed and juice market production, resulting in significant loss of income.

Industry and university experts are urging growers to prepare for more BMSB infestations.

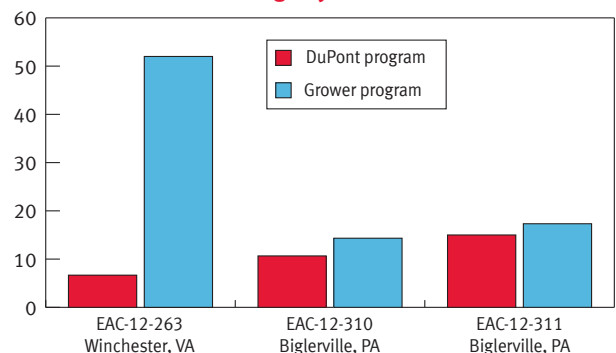


How to get the best results

When used as part of an integrated pest management (IPM) program that rotates modes of action throughout the growing season, Lannate® and Vydate® L will provide fast knockdown to help growers minimize economic losses as well as damages to yield and crop quality.

Repeat applications as necessary to prevent reinfestation from adults migrating into the crop. Consult the label for the minimum application interval for each crop. Brown marmorated stink bugs are very mobile pests that can reinfest the treated area quickly. If another application is needed prior to the minimum application interval, use a different insecticide with a different mode of action.

% Fruit Damage by BMSB at Harvest



DuPont Program: USA-12-263 (Avaunt® 1X, Altacor® + Lannate® LV 5X, Vydate® L 2X, Delegate 5X, Altacor® 1X, Altacor® + Warrior 1X, Warrior 1X); USA-12-310 (Assail 2X, Guthion 2X, Altacor® + Lannate® LV 3X, Lannate® LV 2X, Altacor® 3X); USA-12-311 (Assail 2X, Assail + Sevin 1X, Sevin 1X, Imidan 1X, Altacor® + Lannate® LV 4X, Lannate® LV 1X, Endigo 1X, Scorpion 1X, Belay + Intrepid 1X)

Grower Program: USA-12-263 (Assail 1X, Altacor® 4X, Delegate 6X, Altacor® 1X, Altacor® + Warrior 1X, Warrior 1X); USA-12-310 (Assail 2X, Guthion 2X, Delegate 4X, Imidan + Provado 2X, Diazinon 2X, Altacor® 3X); USA-12-311 (Assail 2X, Assail + Sevin 1X, Sevin 1X, Imidan 1X, Delegate 3X, Lannate® SP 1X, Belay 1X, Lannate® SP 1X, Endigo 1X, Scorpion 1X, Belay + Intrepid 1X)



The miracles of science™

DuPont™ Lannate® LV and Lannate® SP insecticides

Lannate® LV and Lannate® SP are fast-acting contact insecticides. Best results come from direct spraying of the target insect.

- Apply Lannate® LV¹ at the rate of 1.5 pints per acre in barley, field corn, sweet corn, soybean and wheat by ground or air, and 2 to 3 pints per acre in apple, blueberry, nectarine, peach, pear, pepper and tomato. Apply to apple, blueberry, nectarine³, peach and pear by ground only. Applications to pepper and tomato can be by ground or air. Do not apply this product through any type of irrigation system for control of BMSB.
- Apply Lannate® SP¹ at a rate of $1\frac{1}{2}$ pound per acre in barley, field corn, sweet corn, soybean and wheat by ground or air. Apply at a rate of $\frac{2}{3}$ to 1 pound per acre in apple, blueberry, nectarine³, peach, pear, pepper and tomato. Apply to apple, blueberry, nectarine, peach and pear by ground only. Applications to pepper and tomato can be by ground or air.

Repeat applications of Lannate® as necessary to prevent reinfestation from adults migrating into the crop. Consult the label for the minimum application interval for each crop.

DuPont™ Vydate® L insecticide/nematicide

Vydate® L is recommended for control of BMSB in apples, pears, peppers and tomatoes.²

- Apply Vydate® L at the rate of 1.5 to 3 pints per acre by ground, or by air for tomato and pepper only, when insect populations are at threshold.

Repeat applications at five- to seven-day intervals as needed to prevent reinfestation. Minimum application interval for apples and peppers is seven days and five days for tomatoes. Only one application is allowed on pears.

NOTE: Do not use the alternate row-middle technique when spraying orchards with Lannate® or Vydate®, full spray is required for effective BMSB control.

Protect your crops from BMSB and more

Lannate® brands and Vydate® L can be incorporated into a crop protection program along with DuPont™ Altacor® insect control to protect crops from a wide variety of yield and quality-robbing pests. While Altacor® has no impact on BMSB, it does protect crops from biting and chewing insects, including first-generation codling moth and other key lepidopteran pests.

Altacor® offers an alternative mode of action, stops feeding quickly and provides strong residual activity and excellent rainfast properties for long-lasting protection under a range of growing conditions. It also preserves beneficial insects which are instrumental in preventing mite flare-ups (European red mite) and is an excellent fit with IPM and IRM programs.

For more information

Contact your local DuPont representative for more information and visit lannatelv.dupont.com, lannatesp.dupont.com and vydate.dupont.com.

¹ In the state of New York, Lannate® LV and Lannate® SP are permitted under FIFRA Section 2(ee) for use on apples, barley, beans (succulent and dry), blueberries, field corn, sweet corn, peaches pears, peppers, soybeans, tomatoes and wheat for the control of brown marmorated stink bug. In the state of California, Lannate® LV and Lannate® SP are permitted under FIFRA Section 2(ee) for use on apples, barley, beans (succulent and dry), blueberries, field corn, sweet corn, nectarines, peaches, peppers, soybeans, tomatoes and wheat for the control of brown marmorated stink bug. The 2(ee) expiration date in New York and California is 12/31/2014.

² This Vydate® L recommendation is permitted under FIFRA Section 2(ee) for use on apples, pears, peppers and tomatoes for the control of brown marmorated stink bug in the states of Ariz., Calif., Conn., Del., Idaho, Mass., Md., Maine, N.C., N.J., N.Y., Ohio, Ore., Pa., R.I., Va., VT, Wash. and W.Va. The 2(ee) expiration date is 12/31/2015.

³ Nectarine use allowed in Arizona and California only.

Diazinon, Endigo, Guthion, Warrior and DuPont™ Lannate® LV, Lannate® SP and Vydate® L are restricted-use pesticides.

This reference guide is not intended as a substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use, and product warranty and liability limitations, which must be read before using the product(s). Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide alone or in tank-mix combinations.

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