

Performance of Selected Insecticides on Brown Marmorated Stink Bug

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Selected insecticides were evaluated at Virginia Tech in 2011 using green bean dip bioassays on brown marmorated stink bug nymphs and adults, as well as field efficacy trials on bell peppers. For the latter, four weekly spray applications were made using a backpack sprayer, and % stink bug injury to pepper fruit was assessed on three post-spray harvest dates (in Aug). Insecticides were ranked based on their average performance across all three experiments.

Product	Rate oz/Acre	% mortality from bean dip bioassay*		% control in the field: peppers**	Avg. % control from all three experiments
		Nymph	Adult		
Permethrin 3.2EC	8	97.5	98.8	60.6	85.6
Scorpion 3.24	7.7	76.7	90.0	85.4	84.0
Bifenture 10DF	12.8	100.0	81.9	56.3	79.4
Trebon	8	100.0	100.0	36.5	78.8
Baythroid XL	2.8	92.5	88.2	52.8	77.8
Venom 70	4	100.0	80.0	46.0	75.3
Endigo ZC	4.5	75.0	98.7	49.2	74.3
Acephate 97UP	16	100.0	51.8	70.4	74.1
Lannate LV	40	66.7	75.3	79.8	73.9
Leverage 360	2.8 ^a	97.3	74.5	49.9	73.9
Brigadier	9.85	76.7	70.0	69.9	72.2
Hero EC	10.3	91.7	50.0	72.8	71.5
Vydate L	48	85.0	47.0	79.7	70.6
Warrior II	2.5	100.0	72.8	38.0	70.3
Belay	4	75.0	67.5	66.7	69.7
Actara 50 WG	5.5	66.7	81.0	60.3	69.3
MustangMax	4	100.0	35.0	72.8	69.3
Danitol	16	93.3	42.5	60.3	65.4
Assail 30 G	4	90.0	32.8	70.4	64.4
Lambda-cy	3.84	86.0	32.3	62.0	60.1
Asana XL	9	35.0	27.5	76.4	46.3

* Mortality refers to the percentage of dead + moribund individuals after 72 hrs.

** Based on reduction in stink bug injury to pepper fruit from three harvests.

^a Not the highest labeled rate for all vegetables.