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National Vegetable Industry Centre Newsletter

Insecticide options for Australian Plague Locust control on vegetables in NSW

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There are a number of insecticide options for vegetable growers to consider when trying to control Australian Plague Locust (APL) in their crops for the 2010/11 season. Product labels and permits need to be checked to see which insecticides are able to be used in each of the different vegetable crops. The Livestock Health and Pest Authorities (LHPA) can supply landholders with Fenitrothion, Chlorpyrifos or Metarhizium (depending on circumstances and review by the Ranger) and are available under the Insect Pest Destruction Fund. Maldison, Cypermethrin, Lambda-cyhalothrin, Gamma-cyhalothrin, Beta-cyfuthrin and Alpha-cypermethrin are also available for use but will not be supplied by the LHPA. A summary of the insecticides and available permits are listed below.

Metarhizium (Green Guard®) is a biological control agent and is registered for the control of APL in all cropping situations, including vegetables. Green Guard® is suitable where chemical sensitivity issues exist and is suitable for certified organic production. Withholding periods (WHP) are not required when used according to the label directions.

Fenitrothion (1000 g/kg active) is registered for use on cabbages, lettuce and tomatoes to control APL at a rate of 270 to 400 mL/ha with a 14 day WHP.

Permit number - PER 11843. This allows the use of Chlorpyrifos (500 g/L active) and Maldison (various concentrations) to be used to control APL on crops already listed on the approved label. This permit is in force until 31 October 2011. Chlorpyrifos has a permit for the use on all vegetables at a rate of 350 mL/ha with a WHP of three days for fruiting vegetables, 14 days for stalk and stem vegetables and five days for all other vegetables.

Maldison has a permit for the use on cucurbits, tomatoes, cabbages, cauliflowers, lettuce celery, carrots and beans at various rates with a WHP of three days. Maldison (440 g/L active) can be use at a rate of 140 to 230 mL/200 L water, Maldison (500 g/L active) can be used at a rate of 125 to 200 mL/100 L water, Maldison (1000 g/L active) can be used at a rate of 60 to 100 mL/100 L water and Maldison (1150 g/L active) can be used at a rate of 55 to 90 mL/100 L water.

Permit number - PER 10928. This allows the use of Cypermethrin (various concentrations) to be used to control APL on crops where it is already listed on the approved label and is in force until 30 June 2011. Cypermethrin has a permit for use on cabbages, cauliflowers, brussels sprouts, broccoli, kale, Chinese cabbages, turnips, sweet corn and tomatoes. Cypermethrin (200 g/L active) can be used at a rate of 160 to 200 mL/ha with a WHP of one day except for sweet corn which has a seven day WHP. Cypermethrin (250 or 260 g/L active) can be used at a rate of 120 to 200 mL/ha with a WHP of one day except for sweet corn which has a seven day WHP.

Permit number - PER 10927. This allows the use of Lamba-cyhalothrin (250 g/L active), Gamma-cyhalothrin (150 g/ha active), Beta-cyfuthrin (25 g/L active) and Alpha-cypermethrin (100 g/L active) to control APL on crops where each insecticide is already listed on the approved label. This permit is in force until 30 June 2011.

Lambda-cyhalothrin has a permit for use on tomatoes, onions and brassica vegetables to control APL at 24 to 36 mL/ha. There is a one day WHP for tomatoes, a two day WHP for brassica vegetables and a 14 day WHP for onions. Lambda-cyhalothrin also has a permit to control APL at a maximum of 24 mL/ha on potatoes with a WHP of seven days.

Gamma-cyhalothrin has a permit for use on potatoes to control APL at 20 mL/ha with a seven day WHP. Gamma-cyhalothrin also has a permit for use on broccoli, brussels sprouts, cabbage and cauliflower at 20 to 30 mL/ha with a two day WHP. Gamma-cyhalothrin also has a permit for use on tomatoes at 20 to 30 mL/ha with a one day WHP.

Beta-cyfuthrin has a permit for use on tomatoes and brassica vegetables to control APL at 200 to 400 mL/ha with a one day WHP (except broccoli with a longer WHP of three days).

Alpha-cypermethrin has a permit for use on cabbages, cauliflowers, brussels sprouts, broccoli, kale, chinese cabbages, turnips, lettuce, tomatoes and sweet corn to control APL at a rate of 160 to 200 mL/ha. There is a one day WHP for cabbages, cauliflowers, brussels sprouts, broccoli, kale, chinese cabbages and turnips. There is a three day WHP for lettuce and a seven day WHP for sweet corn.

NSW GOVERNMENT Industry & Investment

Insecticides available for Australian Plague Locust control on vegetables in NSW

® indicates registration for locust control ✓ indicates a permit is available for locust control

® & ✓ show which insecticides can be used to control Australian Plague Locust in NSW for each of the individual vegetables listed.

			PER - 11843		PER 10928	PER - 10927			
	Vegetables	Fenitrothion	Chlorpyrifos	Maldison	Cypermethrin	Lambda-cyhalothrin	Gamma-cyhalothrin	Beta-cyfuthrin	Alpha-cypermethrin
CUCURBIT VEGETABLES	Rockmelon		✓	✓					
	Watermelon		✓	✓					
	Pumpkin		✓	✓					
	Cucumber		✓	✓					
	Zucchini		✓	✓					
	Rockmelon		✓	✓					
LEAFY VEGETABLES	Chinese cabbage		✓		✓				✓
	Kale		✓		✓				✓
	Lettuce	®	✓	✓					✓
	Silver beet		✓						
ALLIUM VEGETABLES	Garlic		✓						
	Leek		✓						
	Onion		✓			✓			
	Shallot		✓						
	Spring onion		✓						
FRUITING VEGETABLES	Capsicum		✓						
	Chillies		✓						
	Eggplant		✓						
	Tomato	®	✓	✓	✓	✓	✓	✓	✓
BRASSICA VEGETABLES	Broccoli		✓		✓	✓	✓	✓	✓
	Brussels sprout		✓		✓	✓	✓	✓	✓
	Cabbage	®	✓	✓	✓	✓	✓	✓	✓
	Cauliflower		✓	✓	✓	✓	✓	✓	✓
STALK & STEM	Asparagus		✓						
	Celery		✓	✓					
	Rhubarb		✓						
ROOT & TUBER VEGETABLES	Beetroot		✓						
	Carrot		✓	✓					
	Parsnip		✓						
	Potato		✓			✓	✓		
	Radish		✓						
	Turnip		✓		✓				✓
	Sweet potato		✓						
OTHER VEGETABLES	Sweet corn		✓		✓				✓
	Bean		✓	✓					
	Pea		✓						

Note: The above information is a guide only for the 2010/11 season. Read the permit and product label before intended use