




Diamondback moth on cabbage

Plutella xylostella

	Prevention	Monitoring	Direct Control	Direct Control	Restrictions
 <p>Diamondback moth caterpillar (Whitney Cranshaw, Colorado State University, Bugwood.org)</p>	<ul style="list-style-type: none"> Remove and bury cabbage crop debris including sessile joyweed, ponnanganni, <i>Althernanthera sessilis</i> at least 4 weeks prior to sowing to reduce diamondback moths. Treat seeds with botanical pesticide like neem cake (250 kg/450 g of seeds/ hectare). Plant early in the winter season to avoid the period of diamondback moth build-up. 	<ul style="list-style-type: none"> Look for caterpillars (light yellow-green and about 1 cm long when fully grown). Caterpillars often appear from the 4-leaf stage of cabbage onwards. Inspect crops weekly, especially the underside of the leaves. Consider direct control when you notice 2-3 larvae per plant. 	<ul style="list-style-type: none"> Crush larvae by hand. Uproot and bury/ burn infested cabbage debris (at least 30 cm deep). Use 3 to 6 blue-light traps per acre to capture large numbers of adult diamondback moths. 	<ul style="list-style-type: none"> Rotate insecticides to prevent moth resistance development to pesticides. Do not combine insecticides with fungicides. 	<ul style="list-style-type: none"> When using a pesticide or botanical, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, pre-harvest interval, max number of sprays, restricted re-entry interval. Do not empty into drains and water sources.
 <p>Caterpillar feeding damage on leaves (Whitney Cranshaw, Colorado State University, Bugwood.org)</p>	<ul style="list-style-type: none"> Place seedbeds away from other cabbage fields. Transplant only healthy seedlings free from larvae and pupae of the moth (seen easily) and other pests. 	<ul style="list-style-type: none"> Look for damage on leaves, irregular holes, windowing and skeletonised undersides. Detect diamondback moth adults using pheromone traps (2-4 traps/hectare, 1 trap per acre) and then count moths in traps twice a week early in the morning. Should act when 8 to 10 moths are found per trap every week. 	<ul style="list-style-type: none"> Use 3 to 6 blue-light traps per acre to capture large numbers of adult diamondback moths. Apply aqueous solution of botanical pesticide neem (40 g/L soaked overnight and sieved) on the upper and underside of leaves. 	<ul style="list-style-type: none"> Always consult recent list of registered pesticides of Myanmar. Foliar application of Acephate (such as 75%WP) .Systemic insecticide. Chemical group (Organophosphates) IRAC group 1B. 	<ul style="list-style-type: none"> WHO toxicity class II (moderately acute hazardous). Spray max 2 times in 7-10 days interval within a crop season. Spray after sunset, to not endanger bees. Pre-harvest interval 3 weeks Persists some time in the environment.
 <p>Adult diamondback moth (David Cappaert, Bugwood.org)</p>	<ul style="list-style-type: none"> Intercrop with tomato, chilies, marigolds or mustard every 15-20 rows of cabbage. These plants act as repellent crops for adult moths. 	<ul style="list-style-type: none"> Use 4 to 5 yellow sticky traps (4-5 traps/ acre). Should act at 2-4 moths/trap per week. Place 1 to 3 light traps/acre. When capturing 500 to 600 diamondback moths/ trap/week, consider direct action. Any treatment has to be done quickly after reaching thresholds, because the pest multiplies fast. 		<ul style="list-style-type: none"> Foliar application of Cypermethrin (such as 10%EC. Contact insecticide. Chemical group (Pyrethroids) IRAC group 3. 	<ul style="list-style-type: none"> WHO class II (moderately acute hazardous). Spray max 2 times in 7-10 days interval within a crop season. Wear protective clothing to avoid serious health effects. Moderately harmful to bees and other pollinators. Pre-harvest interval 2 weeks.



Myanmar

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