




Diamondback moth (DBM) on cabbage

Plutella xylostella (syn. *maculipennis*) Esa

	Prevention	Monitoring	Direct Control	Direct Control	Restrictions
 <p>Adult diamondback moth (©Georg Goergen/IITA Insect Museum, Cotonou, Benin)</p>  <p>Larvae of diamondback moth feeding on cabbage leaves (CABI)</p>  <p>Damage on cabbage plant due to diamondback moth infestation (B. K. Badii, UDS, Ghana)</p>	<ul style="list-style-type: none"> Plant cabbage in March to June, or before September to avoid high incidences of egg laying moths Rotate with non-Brassicacae such as onions, legumes and cereals for at least 2 years Remove all crop debris including weeds at least 4 weeks prior to sowing to reduce moth population Transplant only healthy seedlings free of eggs, caterpillars and pupae of the the moth Slash left-over cabbage stems after harvest to avoid regrowth which act as breeding grounds for the moths Establish nursery beds away from production fields to prevent cross infestation Use insect-proof screens to screen seedlings from adult moths that invade to lay eggs 	<ul style="list-style-type: none"> Start monitoring for moths when cabbage is at 4-leaf stage, scout for small light greenish, sometimes grey-greenish, thin larvae on leaves and stems Continue inspecting weekly especially on the underside of the leaves Look out for DBM larvae which when disturbed, will rapidly wriggle their bodies back and forth Use lure traps to monitor adult moth populations; use water/funnel/Wota T traps at 2 traps / ropani. The traps should be suspended about 2-4 feet high). Check traps twice a week early in the morning Use control when 5 or more adult moths are caught in a trap 	<ul style="list-style-type: none"> Use overhead irrigation which can reduce moth populations by dislodging the pest from the plant surface Plant trap crops such as mustard and rape at the edges of the field to reduce DBM attack Collect and destroy moth eggs and larvae by crushing or keeping in a bucket of soapy water Spray with NEEMROC 0.03% EC (Azadirachtin 0.03% w/w (32% neem oil) at 1L/acre. Spray every 10 days from seedling until head formation Spray Novaluron (Rimon 10EC) at a rate of 100g/l. A benzoylphenol urea insect growth regulator. WHO class U 	<ul style="list-style-type: none"> When using a pesticide or botanical, always wear protective clothing and follow the instructions on the product label. Do not use chemicals with the same mode of action year after year as this can lead to resistance. Always consult the most recent list of registered pesticides of MOFA, Ghana Spray Bt based insecticide e.g. Bypel 1 (Perisrapae Granulosis virus + Bacillus thuringiensis), 550g/Ha, Stomach poison IRAC 11A Spray foliage with imidacloprid + emamectin benzoate insecticide (e.g. Dean 62 EC) at a rate of 12g/l. IRAC 4A + 6 Spray foliage with Lambda-cyhalothrin product (e.g. Clear 2.5 EC, Lambda super 2.5EC, Kombat 2.5EC) at 25g/L IRAC 3A 	<ul style="list-style-type: none"> WHO class III (Slightly hazardous) PHI-14 days; REI 1 Day, spray at 14 days interval, ensure thorough spray coverage. Causes moderate eye and skin irritation WHO class II (Moderately hazardous) ; PHI-7, REI -1 day WHO class II (Moderately hazardous) Yellow colour band; REI-when spray dries; PHI-3 days;

Ghana

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