

Field sanitation to reduce Diamondback moth

Recognize the problem

The diamondback moth, also called cabbage moth, is a pest of all types of cabbages including Chinese cabbage. In Swahili the pest is called 'Kipepeo wa kabichi'. The adult is a tiny, thin moth about 1 cm long. It is greyish brown and has a diamond pattern on the back of its wings, hence the name. When shaking the plants, the moths fly from plant to plant. The young pale-green larvae feed from the underside of the leaves. The older larvae, up to 1 cm long, also feed on the growing buds of the plant. In severe attacks, leaves appear window-like. This reduces cabbage quality.

Background

Diamondback moths can spread by flying from one field or nursery to another. The moths lay yellowish eggs on cabbage leaves which hatch after 3 to 4 days. Larvae feed on cabbage for 2 to 3 weeks. Pupation, where larvae develop into pupae, takes place inside a silken cocoon that sticks to the underside of a leaf. The pest can live on all types of cabbage plants, any cabbage growth stage, and on cabbage residues. Therefore, field hygiene is needed.

Management

Farmers are advised to scout the field once or twice a week to discover the pest and damage. Scouting should start 2 weeks after transplanting, and is continued until cabbage head formation.

To maintain field sanitation:

- Plant seedling beds away from production fields
- Remove all cabbage residues of the past season by burning or deep burying to break the diamondback moth life cycle
- Deep ploughing crop residues after harvest helps
- Remove all alternative host plants, such as any volunteer cabbage type of crops and weeds, mustard or radish from in or around the field
- Remove old or damaged leaves from cabbage, because they usually host many pest larvae and eggs

Field hygiene also helps to reduce cabbage diseases. Other cultural control options against diamondback moth are crop rotation with non-cabbage crops, early planting, or intercropping with tomato.

1 cm diamondback moth larva and pupa underside leaf. (Photo by Maine gov. and dpi.vic.gov.au)



Adult diamondback moth 1cm long. (Photo by Duke Univ.)



Scientific name(s) > *Plutella xylostella*

The recommendations in this factsheet are relevant to: Tanzania



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