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Neem against diamondback moth in cabbage

Recognize the problem

The diamondback moth (also called Sefa – sefa) is a grey small butterfly with a raised tail that looks like an umbrella. When seen from above, the wings have a white diamond shape. The larvae are green caterpillars and are found on leaves. They cause leaf and head damage to cabbages and rapes. Larvae make 1-3 mm holes or windows into leaves. Sometimes the holes are incomplete and look like sieves, hence the name sefa – sefa. The damage made to cabbage makes it look unappealing. Losses can reach 90%.

Background

Diamondback moths have 10-14 generations per year which means their numbers can increase fast. The caterpillars of this insect are soft bodied and can therefore be easily killed by sprays if reached. There are also liquids from wild and ornamental plants, such as neem trees (Kaneemu), that can kill these insects. Neem is a fast-growing evergreen tree that can reach heights of 15-20 metres and grows near homesteads.

Management

One method of control for diamondback moth caterpillars is the application of neem leaf extracts:

- Collect fresh leaves from neem trees and pound in a mortar
- Soak 1kg of crushed leaves in a bucket containing 5 litres of water for 24 hours
- Then, take the crushed soaked leaves out and squeeze them to get the extract drain back into the bucket.
- Sieve the extracted solution using a sieve or mutton cloth to get a clear solution for use in the sprayer
- Add liquid soap (10ml/20liter) to the solution so that the extract sticks to the cabbage and caterpillars
- Spray the extract on the leaves using a knapsack sprayer or broom to completely wet both the under and top sides of the leaves
- Spray when you find 2 to 5 caterpillar per 10 plants
- Neem seed can be sourced from ZARI research stations such as Mt. Makulu and Nanga

Cabbage damaged by diamondback moth larva. (Photo by IITA, CC BY-NC)



Neem tree leaves. (Photo by Thendral Muthusami, CC BY-SA)



Scientific name(s) > Plutella xylostella

The recommendations in this factsheet are relevant to: Zambia



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