Chinese kale - Downy mildew

Recognize the problem
Symptoms of downy mildew infection include small, pale yellow spots with indefinite borders on the upper leaf surface. Purplish discolouration of the upper leaf surface is seen on some hosts. A downy growth (sporangiophores) may be seen directly under the spots on the underside of the leaf, on fruits or on stems early in the morning or when foliage is wet. Older leaves usually remain attached. Affected areas on the leaf enlarge and turn brown and papery. When the disease is severe, whole leaves die.

Background
Conditions that favour disease development include:

- Cool, moist weather conditions
- Host weeds found in between the crops
- Crop residues in the field
- Poor plant aeration
- Overcrowding (planting in high densities)

Management

- Provide adequate plant spacing to reduce the density of the canopy and increase aeration
- Pruning of new growth also helps improve aeration
- Remove infected plants and prune infected leaves
- Avoid overhead watering. It lengthens the duration of leaf wetness and favours further development of the disease.
- Plough-under all crop residues/plant debris after harvest
- Practice crop rotation with non-brassica crops
- Weeds should be eradicated in and near seedbeds and out in the production fields
- Carbendazim (2-3g/lit), difenocozole (e.g. Score, 5ml/10lit water) and mancozeb (2-3g/1lit water) can be used as field sprays. Please refer to G&Y list for more details.

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > Hyaloperonospora brassicae

The recommendations in this factsheet are relevant to: Cambodia

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