Prevention of powdery mildew on mango using cultural methods

Recognize the problem
Powdery mildew is one of the most serious diseases affecting mangos of all varieties. The characteristic symptoms of the disease are the white powdery superficial fungal growth on leaves, stalk of panicles, flowers and young fruits. Severe infection can cause the death of the flowers leading to poor fruit set and premature fruit drop of young fruits at the peanut stage. This premature flower and fruit drop reduces the crop load considerably and can even prevent fruit set. Rains or mists accompanied by cooler nights during the time of flowering are beneficial for the spread of the disease. All of these factors can lead to serious yield losses.

Background
The disease can be prevented and managed using chemical fungicides but these are not always practical or economical for use by small scale farmers. Cultural control methods can be used to reduce incidence and manage the disease.

Management
Recommended cultural control methods for reducing disease incidence:

• Monitor regularly to check for infected plant parts. If diseased plant parts are detected, carry out phytosanitary pruning
• Selective pruning of overcrowded trees and branches after harvest increases air circulation and reduces humidity and therefore decreases the ability of the fungus to survive in non-favorable conditions
• Avoid excess application of nitrogen fertilizer to limit the production of succulent tissue
• Remove and destroy infected plant parts as this reduces inoculum and the spread of the disease
• Field sanitation - collect and burn or bury fallen leaves and fruit to reduce inoculum and the spread of the disease

Scientific name(s) > Oidium mangiferae

The recommendations in this factsheet are relevant to: many countries where this pest or problem is present

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