

BUD ROT MANAGEMENT IN COCONUT PALM



INSTITUTE VILLAGE LINKAGE PROGRAMME

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INTRODUCTION

Coconut Palm inspite of its hardy nature, is affected by many diseases and disorders. Coconut diseases may be classified as those affecting the bud, the leaf, the stem and the root. Some of the diseases are fatal and others are debilitating in nature. One among the major diseases is bud rot.

Bud rot is a fatal disease of the coconut palm, characterized by the rotting of the terminal bud and the surrounding tissues. It affects the palms of all ages, but young palms are found to be most vulnerable. The disease is caused by fungus and the incidence is found to be severe during monsoon when the relative humidity is high. With the onset of dry weather the infection becomes less severe and the fungus remains dormant in the leaf base.

SYMPTOMS

The first visible symptom is the withering of the spindle marked with pale colour. The spear leaf or spindle turns brown and bends down. Such symptoms are later observed in younger leaves next to the spindle. On dissecting such affected spindles, rotting of internal tissues could be observed, the tissues show pale pink colour with a brown border. The affected spindle can be easily pulled out at this stage. The spindle droops down among the neighbouring leaves in the crown. A foul smell is emitted by the rotting tissue. The palm ultimately succumbs to the diseases with the death of the spindle.

MANAGEMENT

If the disease is detected when the central shoot is just withering, application of Bordeaux paste on the affected portion can check the disease. Firstly remove all the rotting tissue using a sickle or knife then clean the portion using water and apply Bordeaux paste for the the cut portion. The treated portion should be covered by polythene sheet to prevent washing off of the paste during rains. Soon after the development of the new spear leaf, remove the plastic cover. The removed affected tissues should be burnt in order to prevent the spread of the disease to other palms.

As a prophylactic measures, adjacent healthy palms should be sprayed with 1 per cent Bordeaux mixture or with any other copper based fungicide like Blitox or Fytolan @ 2g /lit of water. A pre and post monsoon sprays of the above fungicide is recommended for the management of the disease.

PREPARATION OF 1 PER CENT BORDEAUX MIXTURE

1. Dissolve one kilogram of Copper Sulphate in fifty litres of water.
2. Dissolve one kilogram of Quick Lime in fifty litres of water seperately.
3. Pour Copper Sulphate solution into the Lime-water slowly with constant stirring.
4. To check the quality of the mixture, dip a polished knife in the solution for two minutes. If the knife gets a reddish stain, then the mixture is acidic and harmful to the plant, if sprayed. To neutralize the mixture, add more limewater, till the non-deposition of the reddish stain on the knife.

PREPARATION OF 10 PER CENT BORDEAUX PASTE

1. Dissolve one kilogram of copper sulphate in five litres of water.
2. Dissolve one kilogram of Quick lime in another five litres of water seperately.
3. Mix the above two solutions to get the Bordeaux paste.

CARES TO BE TAKEN

1. Use only wooden, earthen or plastic vessels, to avoid the corrotion of the metal vessels by the mixture.
2. Always spray freshly prepared mixture for effective management.

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