

Coconut Research Institute
Sri Lanka

LEAF BLIGHT DISEASE AND ITS CONTROL



Leaf Blight disease, also known as grey blight, is common in neglected lands in all coconut growing areas. The condition is particularly prevalent in weak or neglected palms.

Two parasitic fungi known as *Pestalozzia palmarum* and *Bipolaris incurvata* (earlier known as *Drechslera incurvata* or *Helminthosporium incurvatum*) are associated with this condition.

Symptoms

In the early stages of the disease, yellowish brown tiny spots appear on leaflets. These spots gradually enlarge and turn grey, and the peripheral areas of spots become dark brown. As the condition advances, the patches coalesce to form large brown areas, and the leaflets appear dried. The symptoms are predominant on the lower fronds.

Seedlings and young palms are very susceptible to leaf blight disease. The palms are predisposed by conditions such as dry weather, excessive nitrogen, neglect and water logging.

Control

Generally, leaf blight in older palms is not serious. However, outbreaks in seedlings and young palms can cause damage to foliage resulting in a setback in their growth.

As leaf blight appears in weak or neglected palms, it is necessary to ensure that normal fertilizer application is carried out on schedule. If the condition occurs in fertilized lands, an additional dose of Muriate of Potash (or Ash) should be supplied at the following rates, at six monthly intervals when the soil is wet, until fresh symptoms cease to appear.

*Seedlings/
young palms Adult palms*

| | | | |
|--|----|-------|-------|
| Muriate of Potash (60%K ₂ O) | .. | 250 g | 500 g |
| | .. | | |

OR

| | | | |
|-------------|----|------|-------|
| Kitchen Ash | .. | 5 kg | 10 kg |
|-------------|----|------|-------|

If the blight persists after the application of fertilizer, then a fungicidal treatment may be considered. But this is a rare necessity. For this purpose Bordeaux mixture* or any commercially available copper fungicide could be used.

Coconut palms can be kept free of disease by carrying out proper management practices.

* Bordeaux mixture

Bordeaux mixture is prepared as follows: (use earthenware vessels)

| | | | |
|-----------------|----|----|-------------|
| Copper sulphate | .. | .. | - 200 g |
| Quick lime | .. | .. | - 200 g |
| Water | .. | .. | - 25 litres |

Dissolve copper sulphate overnight in 5 litres of water (suspend in a bag to facilitate dissolving). Suspend lime separately in 20 litres of water, and strain through a fine cloth. Add the copper sulphate to the lime, stirring vigorously.

Use immediately after preparation.

Note: Both Bordeaux mixture and Copper fungicides are toxic and should be handled with care.