

SPEAR ROT AND BUD ROT IN OIL PALM



Spear rot without yellowing



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SPEAR ROT

Two categories of spear rot can be recognised based on symptoms: Spear rot with foliar yellowing and spear rot without yellowing.

SPEAR ROT WITH YELLOWING

The earliest symptom observed is the yellowing of the youngest whorl of opened leaves starting from tips downwards. These leaflets become necrotic in a period of 4-6 weeks.

Water soaked lesions are seen at the central portion of spear. These lesions extend downwards as well as upwards. The affected tissues later decay. Extensive rotting and foul smell are noticed in most of the cases. However, the rotting never extends to the meristem.

Symptoms of rotting and yellowing do not progress to the leaves that have emerged before the incidence. The bunches in their axils mature normally. But the leaves emerging later on show rotting and are reduced in size. Though there is inflorescence initiation in the axils of affected leaves, they abort before emergence resulting in total loss in productivity.

The cause of the disease is unknown.

Distribution and spread: The disease is noticed only in oil palm plantations of Kerala to the extent of 1%. Initial occurrence of the disease is sporadic. The spread is faster in low lying marshy

areas, valleys and slopes. However, no definite pattern of spread is observed.

Disease incidence is higher during the rainy period and on palms in the younger age group (3-10 years).

Control: Definite control measures are not available for this malady. However, eradication of diseased palms by uprooting and destruction by burning *in situ* helps in reducing further spread of the disease.

SPEAR ROT WITHOUT YELLOWING

Water soaked lesions are seen at the central portion of spear. The lesions extend upwards and downwards, but only to a limited area. The spear on unfurling exhibits leaf rot symptoms. No leaf yellowing is seen in this case.

Control: This can be cured by cleaning the affected portions and spraying with carbendazim 0.1%.

BUD ROT

Bud rot can be distinguished from spear rot in that in bud rot the rotting initiates at the basal portion of spear closer to meristem and extends towards the tip of the spear. Infection advances to the meristem and kills the palm outright if uncared for.

Control : Bud rot can be controlled by cleaning the affected tissues and drenching the crown with carbendazim 0.1%.



Spear rot affected palm showing leaf yellowing.

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