

# STEM BLEEDING DISEASE IN COCONUT



CPCRI

**INSTITUTION VILLAGE LINKAGE PROJECT**

(National Agricultural Technology Project)



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## **STEM BLEEDING DISEASE IN COCONUT**

Stem bleeding disease is one of the major diseases of coconut and is prevalent in almost all the coconut growing countries. It was first reported from Sri Lanka and later from India and other countries. In India, the disease is prevalent in all the major coconut growing states. It causes considerable damage to coconut palms, thus resulting in economic loss to the farmers.

### **Symptoms**

The disease is characterized by the exudation of dark reddish brown liquid from the longitudinal



*Disease affected garden*

cracks in the bark, initially from the base of the trunk. One or more lesions, lying close by, may coalesce to form large patches. The liquid that oozes out dries up and turns black. The tissues below the lesions become water soaked and get discoloured. The lesions spread upwards as the disease progresses. In advanced stages, the leaf size gets reduced leading to reduction in crown



*Pencil point symptom*

size. The rate of leaf production goes down. The production of bunches is affected and nut shedding takes place. The trunk gradually tapers towards the apex resulting in gradual thinning of the stem (pencil point). The progress of the disease is faster during July to November.

## Causal organism

The fungus *Thielaviopsis paradoxa* is the causal agent. Presence of growth cracks on the trunk, severe summer followed by water stagnation, imbalanced nutrition and excess salinity can act as predisposing and disease aggravating factors.

## Control

Diagnosis in the early stage is important for imposing control measures for the disease. The following integrated control measures are suggested for the management of the disease:



*Chiseling affected tissues*

1. Remove completely the disease affected tissues using a chisel and smear the chiselled portion with calixin (Tridemorph) 5% (5 ml calixin in 100 ml of water). Apply coal tar after 1-2 days on the treated portion.





*Smearing with calixin*

2. Destroy the diseased materials obtained during chiseling by burning.
3. Apply the recommended dose of organic manures and fertilizers to the palms regularly.
4. Apply neem cake @ 5 kg per palm in the basin along with other organics.
5. Provide irrigation during summer.
6. Provide good drainage facilities in the garden where ever necessary.
7. Root feeding of calixin 5%, thrice a year during April-May, September-October and January-February to prevent further spread of the symptom.
8. Attack by shot hole borer insects like

*Xyleborus* or *Diocalandra* can be controlled by swabbing with sevin (carbaryl 50% WP) 50% @ 3 g / litre.



*Root feeding of calixin to coconut palm*

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Extension Publication No.80 (December, 2000)

Published by : **K.U.K. Nampoothiri,**  
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Photo credit : **K. Shyamaprasad**