

## TANJORE WILT / BASAL STEM END ROT: Ganoderma Wilt / ANABE ROGA

This disease first appeared in the coastal areas of Thanjavur district of Tamil Nadu after cyclones of 1952 and 1955 and hence the names Thanjavur wilt. In Tamil Nadu it is prevalent in Thanjavur and Chengulpet districts. In Karnataka it is found in Maidan areas. This disease is of recent occurrence in many parts of Kerala, especially in the districts of Palakkad, Malappuram, Thrissur, Kollam, Thiruvananthapuram and Wayanad.

**Causal organism:** *Ganoderma lucidum* and *Ganoderma applanatum*

- Initial symptoms of Thanjavur wilt (Ganoderma wilt) start with withering, yellowing and drooping of the outer whorl of leaves.
- This is followed by exudation of reddish brown liquid through cracks at the base of the trunk and oozing spread upward. The tissues on the bleeding spots are soft to touch.
- Decaying of tissues at bleeding point and rotting of the basal portion of the stem
- The bark turns brittle and often gets peeled off in flakes, leaving open cracks and crevices. The internal tissues are discoloured and disintegrated, emitting a bad smell.
- Bracket formation at the base of the trunk. Ganoderma appears at the base of the trunk. Ultimately the palm dies off

### **Management**

#### **Cultural Method**

- Remove and destroy all affected palms.
- Green manure crops must be raised and ploughed in-situ at the time of flowering.

#### **Biological Method**

- Apply *Pseudomonas fluorescens* (Pf1) @ 200g/palm + *Trichoderma viride* @ 200g/palm/year.
- Apply 200g Phosphobacter and 200 g Azotobactor mixed with 50kg of FYM/palm.
- Apply FYM 50kg + neem cake 5 Kg once in 6 months along with fertilizers.

#### **Chemical Method**

- Isolation of trench around the tree, 4 feet away from the base of the trunk. Apply Sulphur dust inside the trench.
- The bleeding patches in the stem may be chiseled and protected with tridemorph (5% calxin) and subsequently with hot coal tar.
- Aureofungin-sol 2 g +1 g Copper Sulphate in 100ml water or 2 ml of Tridemorph in 100 ml water applied as root feeding. (The active absorbing root of pencil thickness must be selected and a slanting and a slanting cut is made. The solution to be taken in a polythene bag or bottle and the cut end of the root should be dipped in the solution).
- Trunk injection / root feeding with Calixin 3 ml/tree.

- Forty litres of 1% Bordeaux mixture should be applied as soil drench around the trunk in a radius of 1.5m.

## SYMPTOMS



