

Root rot Disease in *Acacia catechu*

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Root rot in khair (*Acacia catechu*)

Generally in drier localities, in north India and peninsular India, more common in disturbed sites

Symptoms – Die-back, Top-dying, stag-headedness, mortality, sudden wilting, wind-throw

Pathogen – *Ganoderma lucidum*

- Attacks 64 tree species**
- Invades root system, kills functional vascular tissue, rapidly decays wood in roots & butt region**
- In a khair plantation mortality - 12% seedlings up to 3 years, 40% by 7th year, 55% by 9th year in Siwaliks**
- In an acacia arboretum mortality – 1st year – 9%, 2nd year – 15%, 3rd year – 31%, 9th year – 52% at Seoni, M.P.**



Die-back symptoms



**Root rot
by *G.
lucidum***



Management

✿ **Surveillance**

✿ **Eradication**

✿ **Isolation trenches**

✿ **Mixed plantation**

✿ **Resistant species**

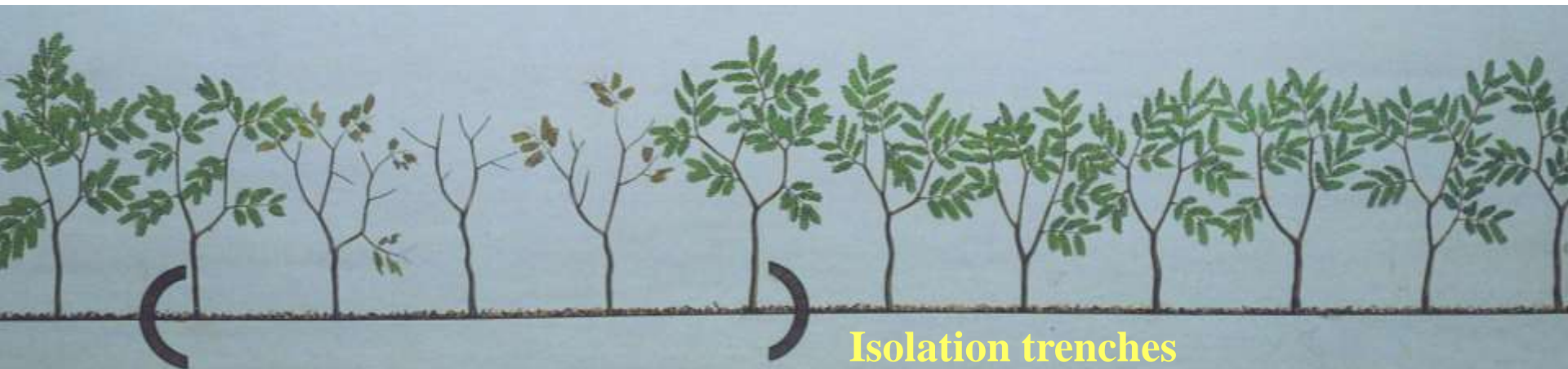
✿ **Regulation of management practices**

✿ **Fungicidal application**

Ganoderma Root Rot in Trees



Mechanical control



Ganoderma Root Rot in Trees

Damage

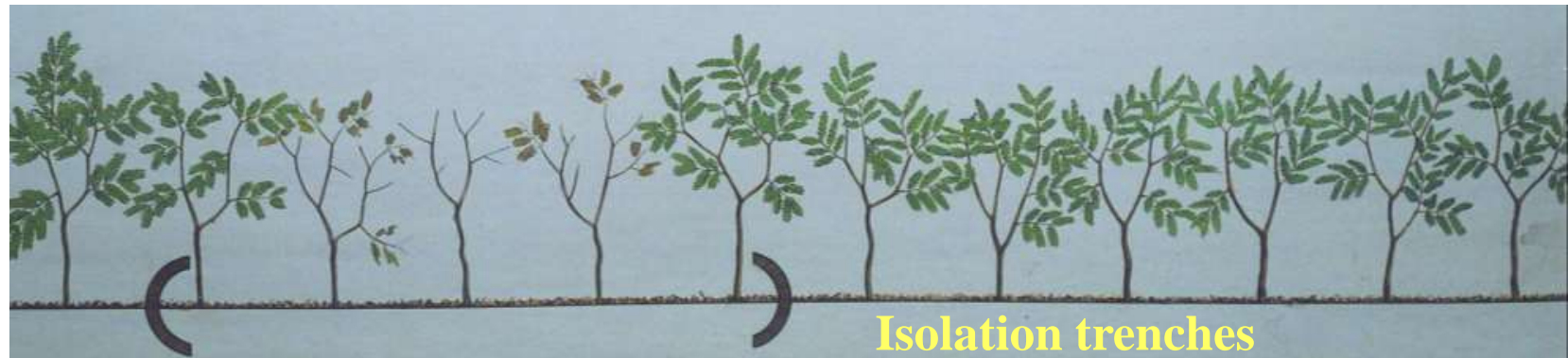
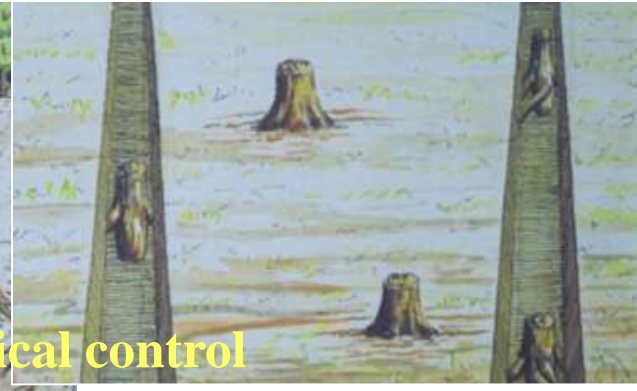
- In khair plantation mortality - 12% seedlings up to 3 years, 40% by 7th year, 55% by 9th year in Siwaliks, UA
- In an acacia arboretum mortality – 1st year – 9%, 2nd year – 15%, 3rd year – 31%, 9th year – 52% at Seoni, M.P.
- Mortality 100% in Poplars at Phillaur, Punjab



Disease spread



Mechanical control



Isolation trenches