

Red Sander Production Technology

Common name: Red Sander

Scientific name: *Pterocarpus santalinus*



Red sander Bark



Red sander tree

Plantation Techniques

- Land should be ploughed thoroughly
- Planting Spacing: 45 x 45 x 45 cm (Length x width x height)
- 12 months old saplings should be planted in pits
- Weeding, cleaning, pruning, and irrigation should be done up to 3-year-old plantation

Utility values

- Wood can be used in the perfume industry
- Wood can be used for medicinal purposes

Harvesting rotation: In natural forest, rotation is 100-120 years, in artificial regeneration it is 70-80 years and in coppice regeneration, it is 40-60 years.

Climate and soil: Mostly occurs in monsoon climate, under tropical and sub-tropical conditions. Sandy loam soil, 6-7 pH not exceeding 8.5 & well drained.

Pit size: 1.5 feet (Length) x 1.5 (Width) x 1.5 (Height)

Pit cost: Rs. 35/pit (Price varies with soil type)

Spacing: 3.3m x 3.3m

Seedlings requirement: 430/Acre

Planting: It is done in the monsoon period which has high success. Square or line planting is done in 45-60 cm³ size pits for seedlings and stump planting, 15 cm diameter holes and 30 cm depth are prepared.

Plant protection

1. **Predominant pest:** Red sanders Stem borer Management practice: Dip cotton in 5% Dichlorvos with 2 ml/ltr of water keep it in stemborer position and seal it with clay soil.
2. **Predominant disease:** Leaf blight (*Rhizoctonia solani*) and fungal on fruits (*Alternaria* sp)

Nutrition management: Farm Yard Manure: Minimum 2 Kgs. (Rs. 3/seedling)
Azospirillum & Phosphobacteria: 50 ml (or) 50 g/seedling VAM: 50 g (Rs. 3 each/seedling) Total: Rs.12/seedling

Thinning: The crown of teak trees has competition; therefore, the unhealthy trees should be thinned periodically. Final thinning: 80-100 trees will remain acre.

Intercropping: Crops can be cultivated until the canopy closes.

Temperature Range: 11°-46°C

Rainfall: Hot, dry climate with normal rainfall of 350-1150 mm.

Irrigation: Drip irrigation. During the early stage, weekly thrice with a minimum of 3-4 liters/seedling. Irrigation shortens harvesting time. After 8 years, no irrigation is needed.

Pruning: Branches need to be removed periodically to allow the tree to grow straight without affecting the main stem. After 21 feet, no pruning is needed. Pruning helps to get knot-free timber.

Yield: It yields a volume of 1.58 cum of timber per year per tree (increment)

Clear Bole -Height: 21-4 feet & Girth: 0.80-1.00 m

Heartwood: 10-18 kg/Tree. Age: 15-20 yrs.

Approximate Price: Rs. 10,000-13,000/kg (Rs. 1.00-1.30 lakh/tree).

Cost of cultivation: Max. Rs. 8-10 lakhs Approx yield (Including CoC): Rs.
400-520 lakhs Netprofit: Rs.

Net profit: 392-510 lakhs (Farm Gate Price) (Price increases 5-6% every year)

Special features: Furniture, Musical Instrument (Shamisen in Japan), Dye (Colouring Agent), Herbal Medicine, Radioactive Industries.