CULTIVATION PRACTICES OF EUCALYPTUS

Description

Eucalyptus is a fast growing, medium- sized to tall tree attaining 20-50m in height and upto 2m in diameter and strongly coppicing tree possessing a wide range of soil and climatic adaptability. Eucalyptus is known for its drought hardiness, although annual rainfall of 800 mm is preferred. The species grows under a wide range of climatic/soil conditions from warm to hot, sub humid to humid and from good to degraded soils.

Plantation Establishment and Maintenance Plan

Plan of activities	Activities to be followed
Selection of Clones	- Site specific clones based on soil analysis
Site development	- Bush clearing, Disc ploughing or deep ripping on compact sites and compartmental bunding
Espacement	- 3mx1.35m
Planting Season	- June to October
Pit size	- 45 cm x 45 cm x45 cm
Manuring	- Neem based nutrients to avoid termite attack - 50 g of phosphate and 250g of Vermicompost or Farmyard manure per pit
Irrigation	- Protective irrigation is essential. In case of monsoon failure, protective irrigation may be provide
Ploughing	- One cultivator ploughing at the end of November - Disc ploughing during the month of February
Weeding	- 1 hand weeding and soil working after ploughing
Fertilizer management	- One time application of 50 grams of organic manure per plant
Singling out	- Singling of multiple shoots, by retaining 1 or 2 at each plant in terms of coppiced area after 6 months
Causality replacement	- Causality replacement within one month after planting
II year maintenance	- One Disc ploughing during the pre-monsoon period and one cultivator ploughing at the end of the rainy season - Hand weeding and soil working - Application of 50 grams of organic manure per plant
IV year	- Two Disc ploughing in the month of June-

maintenance		September
V year maintenance	-	One Disc ploughing based on plantation growth
Intercropping		
a.Rainfed	-	Sowing of Green Manure crop seeds (Kolunji, Sanappai & Thakkaipoondu) @ 20 kg per Ha to improve the soil fertility status and also to control weeds
b.Irrigated area	-	Agricultural crops like Sunflower, Tomato, Ground nut, etc., as intercrop during the first 2 years.
Pest and Disease management		
a) Gall	-	Selection of gall resistance variety - Release of natural parasitoid
b) Termite	-	Application for Nimbisides 2 ml per litre
c) Pink disease	-	Application of bio-fungicide
d) Stem canker	-	Application of bio-fungicide

Silvicultural and Management System:

Simple Coppice System:

The Simple Coppice System consists in clear felling a fixed area annually, and regenerated by coppice shoots. The best season for coppicing is a little before the growth starts in spring because, at this time, there is a large reserve of food material in roots, which is utilized by the coppice shoots. The stumps should be neither be too low or high. The first thinning is usually carried out in the second year and in this the number of shoots is reduced one to two per stool.

Yield:

The average yield per Ha in 5 year rotation is varying from 50MT to 75MT for clonal plantations as compared to seedlings origin plantation i.e., 30MT to 50MT. However the yield may vary based on the site conditions and management of plantations.