



EUCALYPTUS

GENERAL INFORMATION

Eucalyptus belongs to family of Myrtaceae with 300 species of genus. It is a native of Australia and Tasmania. It is fast growing tree in world and attained great height (one of its species attained height of 480 feet). It is also known as gum tree, nilgiri tree or safeda. It is planted for fuel wood, poles, timber, and biomass and for essential oil purpose. Essential oil of Eucalyptus has special space in Ayurveda Treatment. Also it is good source of nectar for honey bees. Major eucalyptus growing states are Andhra Pradesh, Bihar, Goa, Gujarat, Punjab and Haryana, Madhya Pradesh, Maharashtra, Uttar Pradesh, Tamil Nadu, Kerala, West Bengal and Karnataka.

CLIMATE

Temperature

0-40°C

Rainfall

500-3000mm

Sowing Temperature

25-35°C

• *Harvesting Temperature*

20-40°C

SOIL

For good growth it required soil having good drainage capacity. It can grow in variety of soil but it give best result when grown on well drained, rich in organic content loamy soils. Water logged, heavy alkaline and saline soils are not suitable for eucalyptus cultivation.

POPULAR VARIETIES WITH THEIR YIELD

Variety: Eucalyptus camaldulensis, FRI 4 and FRI 6, Eucalyptus globules, Eucalyptus citriodora.

LAND PREPARATION

Eucalyptus is mainly planted for industrial purpose. For commercial plantation make land weed and stubble free. Plough land for two three times and bring soil to fine tilth. For plantation dig pit of size 30cm x 30cm x 30cm or 45cm x 45cm x 45cm.

SOWING

Time of sowing

Optimum time for planting is from June to October.

Spacing

For high density planting select spacing of 1.5m x 1.5m (plant population near about 1690 plant/acre) or 2m x 2m (near about 1200 plants/acre). For initial years, intercrops can be taken. When intercropping is done choose wider spacing of 4m x 2m (near about 600) or 6m x 1.5m or 8m x 1m. Crops like turmeric and ginger or medicinal plants can be taken as intercrops. 2m x 2m is most widely used spacing.

Method of sowing

Transplanting seedling in main field.

SEED

Seed Rate (kg/acre)

With spacing of 1.5m x 1.5m gives plant population near about 1690 plant/acre whereas spacing of 2m x 2m accommodates near about 1200 plants/acre.

Seed Treatment

Not required

NURSERY MANAGEMENT AND TRANSPLANTING

It can be propagated by seed as well as through vegetative propagation. For nursery prepare raised beds in shades and sow seeds on it. At temperature range of 25-35°C rapid growth of seedling is achieved. Seedlings are ready for transplantation in polythene bag 6 weeks after sowing i.e at second leaf pair stage. 3-5 month after sowing they are ready for transplantation in field. Transplantation in field is mostly done in rainy season.

FERTILIZER

Seedlings are transplanted in main field 3-5 months after sowing. Seedlings are planted in pits with onset of monsoon. At time of planting apply neem based nutrients along with Phosphate@50gm and vermicompost@250gm/pit. Neem based nutrient protect seedling from termite damage. In first year apply 50gm of NPK fertilizer per plant. In second year, apply NPK (17:17:17)@50gm per plant. Also take hand weeding operation and keep check on weed growth.

WEED CONTROL

At initial stage two or three hand weeding are required to keep field weed free.

IRRIGATION

Irrigation is needed immediately after transplantation in main field. In monsoon irrigation is not required but provide protective irrigation if monsoon fails. Eucalyptus is drought tolerant crop, but for optimum yield it required overall 25 irrigations in entire growth period mostly. Irrigation is needed mostly in summer season and to some extent in winter season.

PLANT PROTECTION



- **Pest and their control:**

Termite: In young plant termite is most dangerous insect and it damage crop to great extent. To protect crop from termite attack apply Nimbicides@2ml/Ltr of water.



Gall: It causes drying of leaves, growth retardation, poor stem formation. New leaves appeared in gall infected plants are stunted. If infection observed, remove and destroyed gall affected plants. Use gall resistant varieties.



Stem Canker: If infestation is observed, to control, apply Bordeaux mixture in root portion.

HARVESTING

From clonal Plantation yield of 50MT to 76MT in five year rotation is obtained whereas from origin plantation 30MT to 50MT is obtained. Yield may vary as it depends upon farm management practices, plant density, climate etc.

REFERENCES

1.Punjab Agricultural University Ludhiana