

## Influence of growing media on seedling growth and biomass of laurel (*Terminalia tomentosa* Heyne ex Roth)

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### ABSTRACT

Effect of growing media on growth and biomass was studied. Different ratios of soil, sand, FYM and ash were mixed to form eight media. Soil medium consisting of soil, sand and FYM in the ratio of 2:1:1 resulted in significantly maximum height (55.25cm), collar diameter (0.61cm), number of leaves (17.87) seedling, fresh weight and dry weight of shoot (72.59 g), and (43.00 g respectively), total fresh weight 113.63 g) and total dry weight of seedling 63.70 g). whereas, the soil medium having soil, sand and FYM in the proportions 1:1:1 was superior over rest of the soil media by producing root length (34.35cm), number of laterals (42.00), fresh weight of root (41.68 g) and dry weight of root (22.67 g).

**Key words :** Growing media, Ash, Biomass, Seedling.

Laurel is one of the commonest and widely distributed trees from Himalaya and southwards throughout the peninsula. It is common associate of sal and teak in their respective zones. For hundred years laurel has been a great utility timber in India being considered next in strength and general usefulness to Sal in north and Teak in south India it is very widely used for buildings beams, rafters, door and window frames. Laurel has been extensively utilized as best MPT to breed tassar silk worms (Srivastav, 1991). Potting media influence the quality of seedling and ensure better establishment and growth when planted in main field. The information on the effect of media on growth of seedlings is absolutely essential for large-scale production of healthy seedlings in the nursery (Noble, 1993). *Terminalia tomentosa* is an economic multipurpose species well known for its timber, tannin and fodder of

commercial importance. In view of enormous potentiality of *Terminalia tomentosa* for afforestation of degraded land and realization of its multifaceted uses, the present investigation was undertaken to study effect of seed weight and growing media for production of quality seedlings.

### MATERIALS AND METHODS

The study was conducted at the Silviculture Nursery, College of Forestry, Sirsi, Karnataka, during 2001-2002. The area is hilly zone (Zone 9) of Karnataka State located at an altitude of 619 m above the mean sea level. It lies at 14° 36' N latitude and 75° 53' E longitude. The study was conducted by planting stumps. Stumps of size, 1-2 cm collar diameter, 3 cm shoot and 15 cm root were prepared from one year old seedlings. Soil was dugout on boundary of nursery, dried and sieved through mesh before use. Sand was obtained from riverbed while farm yard manure

Table 1 : Treatment combinations of growing media

Treatment	Soil	Sand	FYM	Ash
T1	1	1	1	-
T2	2	1	1	-
T3	2	2	1	-
T4	1	2	1	-
T5	1	1	1	1
T6	2	1	1	1
T7	2	2	1	1
T8	1	2	1	1