

**Melia dubia Cav. cultivation in Gujarat, India: Research Development and Outreach****N.S. Thakur\*, R.P. Gunaga, H.T. Hegde, R.S. Chauhan and D.C. Bhuva***College of Forestry, Navsari Agricultural University, Navsari-396 450, Gujarat, India*

\*Email: drnsthakur74@gmail.com

**Keywords:** *Melia dubia*, agroforestry, spacings, sole plantations, paper and pulp, plywood**1. Introduction**

Against the global average productivity of 2.1 m<sup>3</sup> hectare<sup>-1</sup> year<sup>-1</sup>, the productivity of Indian Forest is only 0.5 to 0.7 m<sup>3</sup> hectare<sup>-1</sup> year<sup>-1</sup>, while TOFs are producing nearly 3.06 cum per ha per year. In this backdrop, many efforts have been made to meet wood deficiency by implementing programmes and schemes oriented to supply sustain wood to various wood-based industries. Species like Eucalypts, Poplars, Acacias, Casuarinas, *etc.*, have been introduced, and to some extent, raw material supply was assured. *Melia dubia* Cav., an important multipurpose tree, indigenous to Western Ghats region of India, and is common in moist deciduous forests of the Indian states. It is a short rotation species (Thakur et al 2021a) having multiple uses like very good raw material for ply and pulp wood, plywood industries, high-quality timber for various purposes (Parthiban et al 2019).

**2. Material and methods**

*M. dubia* is native species of Gujarat state and under Gujarat Government funded research project, research on candidate plus tree selections, multi-location progeny evaluations trials, investigations on its suitability as agroforestry, allelopathic propensity and block plantations under varying spatial geometries, propagation protocols, as alternate feed source for livestock, *etc.* have been done in last decade.

**3. Results and discussion**

Over, almost one decade research divulged that there is good repository of superior genotypes in south Gujarat, multi-locations progeny trials pinned out that it can achieve more than 30 tonnes biomass per hectare in 5 years, local source have germination up to 30 per cent (Chauhan et al 2021) medicinal and aromatic, vegetable crops, pulses can be grown successful in agroforestry models (Thakur et al 2021a, 2021b), varying spatial geometries can be adopted to produce wood for various industries depending upon the dimensions required. Apart from its use in wood-based industry, it could be an alternate energy rich feed resource (both fruit as well as fodder) for live stocks. It has very good coppice ability and clonal propagation can be done through root sucker sections without sacrificing the selected plus trees (Thakur et al 2021c). Farmers in Gujarat have adopted this species and various paper-pulp and ply wood industries have now started using this species. Thus, the series of studies indicated that *M. dubia* is fast growing multipurpose tree species which can be success fully adopted in Gujarat with assured market.

**References**

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