Fast-growing red sanders clone ready to hit market

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Coimbatore: Tamil Nadu Agricultural University's (TNAU) Forest College and Research Institute in Mettupalayam has identified the first scientifically proven clone of red sanders called TNRS 1, which can grow to a height of 12m and a girth of more than 24 inches within 15 years.

TNAU in 2004-05 had developed germplasm of 24 varieties of red sanders from Tamil Nadu and Andhra Pradesh. "We have been evaluating them after planting for the last 15 years. We identified a superior variety and multiplied it with cloning," FCRI dean K T Parthiban said. "The TNRS 1 variety is natural, relatively fast growing and has 35 to 40 different chemical constituents, which give it its quality and medicinal properties."

Some of the top 10 compounds include alpha-bisabolol, which has anti-inflammatory, anti-irritant and anti-microbial properties, 2-naphthalenemethanol used in certain surfactants and mefloquine used to treat malaria.

The chosen variety in natural conditions, without special care or maintenance, takes 30 to 40 years to reach maturity. "However, in organized cultivation and extra care, the tree grows much faster," the dean said. "Extra care includes irrigation every fortnight, pruning and preventing knots so all resources are focused on the stem, so that the tree grows straight and tall. We applied DAP fertilizer once a year for the first three years, followed by organic manure for the next 12 years. All this, especially pruning, helps it to have more utilizable biomass."

TNRS 1 is suitable for red soil, including red laterite, red loam and red alluvial soil and for low altitudes and plains. "The seedlings we supply are 1ft tall. We can supply any number of seedlings. We are also encouraging our student business incubators to find buyers for the wood in the organized market," Parthiban said.

Red sanders, widely known for its rich hue and therapeutic properties, is highly prized in China and Japan. It is also used to make musical instruments and furniture. The wood is frequently smuggled out of Tamil Nadu forests.

Until February 2019, export of the wood was banned because it was listed in appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

"Finding domestic buyers for the wood is difficult and we are trying to find international buyers through organized channels," the dean said. "One tonne of first-grade red sanders sells for Rs 50 to Rs 55 lakh. One matured tree can yield around 100kg of heart wood."

The university has 80 matured trees of the variety and 2,000 clones on sale.