

Forest Institute's modified tree varieties popular with plywood makers

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COIMBATORE: Money has been growing on trees for the Institute of Forest Genetics and Tree Breeding (IFGTB) in Coimbatore. In the last two months, the forestry research institute has sold casuarina seeds worth Rs 4 lakh and eucalyptus seeds worth Rs 25,000 after developing two new slender varieties of the species.

IFGTB released seventeen cloned and genetically modified varieties of casuarina and eucalyptus, CJ9 (Casuarina junghuhniana) and EC5 to 11 (Eucalyptus camaldulensis) in October 2014 to meet the demand for wood from the paper and plywood industries. The institute imported some original eucalyptus tree species from Australia and began work on the genetically superior trees seven years ago. While the most suitable varieties were cloned, some were genetically modified too.

Cloning is done by cutting branches and parts of the superior models and treating them with growth hormones so that they grow into new trees which are similar to the parent tree. Genetic modification is done by combining

branches of two different models of trees, grafting them and treating them with hormones. While the first four varieties were released in 2010 called EC 1 to 4, the remaining seven varieties were released four months back.

The institute has now developed various versions of both trees which can grow in various soil and weather conditions. "We have eucalyptus and casuarina trees which can grow in dry regions like Pudukottai, Sivagangai, Aruppukottai and Thirukoviloor," said V Sivakumar, senior scientist at IFGTB and part of team that developed the eucalyptus clones. "They require just 400mm of rainfall annually and not much maintenance," he said.

"The casuarina tree, which acts as a wind breaker and is grown around banana plantations, is very popular with farmers in Coimbatore district," said IFGTB senior scientist Buvaneshwaran.

The trees grow to a uniform height and have slender trunks of uniform width and shorter branches. "This is why farmers prefer our cloned trees to species that grow in the wild," said the institute's spokesperson A Karthikeyan. "Our clones and genetically modified models have higher wood value, biomass volume and quicker rotation cycles (36 months)," he said. "Most importantly, they are uniform so every tree gives them a yield, unlike a forest where every tree is different in terms of bulk, number of branches and height," he said. The cloned varieties do not produce oil.

While large batches of these seeds are sold to paper mills and plywood industries that have their own plantations, they are also sold to farmers. While 1kg of casuarina and eucalyptus seeds cost Rs 4,000 and Rs 2,500 respectively, the price of the wood is Rs 5,000 to Rs 7,000 per tonne.

Source:

<http://timesofindia.indiatimes.com/home/environment/developmental-issues/Forest-Institutes-modified-tree-varieties-popular-with-plywood-makers/articleshow/46535553.cms>