

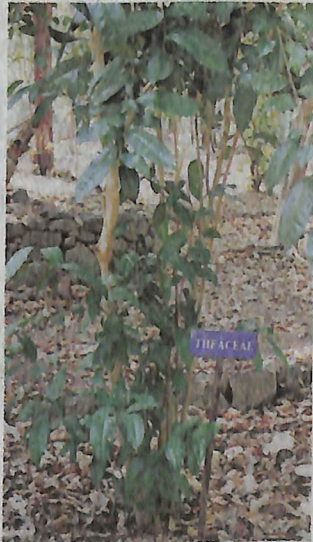
# Research institute to play Noah's Ark

## Tropical botanical garden to conserve plant resources for post-disaster restoration

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The Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI) at Palode, near here, is planning to establish germplasm collections of special groups of plants as a repository for the conservation and post-disaster biodiversity restoration.

“Ecological regeneration assumes significance in the light of the looming threat posed by climate change to rare, endangered and threatened species in regional habitats. The project is aimed at creating a collection of plant genetic resources that can be relied upon for biodiversity evaluation and reintroduction of species in the wake of disasters such as tsunami or climate-induced events such as forestfire, drought or flood,” says R. Prakashkumar, Director,



*Camelia kissi* and *Piper sarmentosum* which were wiped out from the Andaman and Nicobar Islands have been conserved at the JNTBGRI.

JNTBGRI.

The institute also has plans for a conservation biotechnology programme for mass multiplication of eco-



logically important species in its field gene bank.

“Many of the lower groups of plants are extremely vulnerable to events such as the

floods that occurred in Kerala. It is important to identify these species and conserve them,” says Dr. Prakashkumar.

### Insular flora

The institute hopes to replicate its success in conserving the rich biodiversity of the Andaman and Nicobar Islands since 1994. The sprawling campus is home to a collection of flora from the Bay Islands, including rare endemic species confined to isolated pockets and susceptible to natural disasters, unscientific forest extraction and activities such as tourism promotion. Two of the 130 species in the collection, namely *Camellia kissi*, a wild relative of the tea plant and *Piper sarmentosum*, a pepper vine with anti-cancerous properties, were wiped out from the islands during the tsunami of 2004.

“We could multiply the plants in our collection and share the germplasm with the Botanical Survey of India,” says Sam Mathew, Senior Scientist, JNTBGRI. *Piper sarmentosum* was later reintroduced into the islands by the BSI as part of an ecosystem restoration programme.

Some of the ecologically important species in the field gene bank collection at the JNTBGRI include *Calamus andamanicus*, the second best rattan in the world growing up to a height of 140 feet, *Korthalsia rogersii*, an endemic rattan thought to be extinct from the Andaman islands, *Myristica andamanica*, an endemic wild relative of the commercial nutmeg, *Freycinetia insignis*, a climbing screwpine and *Piper ribesoides*, a critically endangered wild relative of commercial pepper.