

ICAR-CIARI Registers Unique 'Andaman Kokum' Germplasm at National Level



The ICAR-Central Island Agricultural Research Institute (ICAR-CIARI), Sri Vijaya Puram, has achieved a significant milestone in the conservation of the Andaman Islands' unique biodiversity with the national registration of a unique germplasm of **Andaman Kokum** (*Garcinia dhanikhariensis*) at the ICAR-National Bureau of Plant Genetic Resources (NBPGR), New Delhi.

Andaman Kokum is a micro-endemic species found only in South Andaman Island. At the time of its discovery in 1993, only a single individual plant of the species had been reported. Recognising its conservation importance and potential commercial value, researchers at ICAR-CIARI initiated systematic research on the species in 2015 to develop conservation strategies and explore its applications in the food, pharmaceutical and allied industries. [Beaches & Islands](#)

As part of the conservation efforts, the institute developed efficient regeneration protocols and raised more than 2,000 seedlings at its Horticultural Plants Propagation Unit. These seedlings helped create genetic variability within the species and were also used for habitat enrichment programmes across the islands and for creating public awareness about the endemic plant.

Advanced phytochemical studies revealed that Andaman Kokum is a rich source of industrially and pharmaceutically important compounds, including hydroxycitric acid, anthocyanins, fatty acids and phenolic compounds. Based on these findings, ICAR-CIARI recommended the species as a potential fruit crop for the islands and named it "Andaman Kokum" to provide it with a national identity.

Researchers also standardised grafting techniques for the dioecious species, enabling farmers to cultivate assured fruit-bearing plants instead of waiting several years to determine whether naturally grown seedlings would be male or female. Extensive field surveys conducted by the institute led to the identification of additional individual trees, including male plants that had not previously been reported for the species.

Selected progenies of these trees were planted in experimental blocks for long-term evaluation. Following years of assessment, researchers identified a unique germplasm characterised by consistently large fruit size and a high proportion of rind, the economically valuable part of the fruit. The findings of these studies have been published in the peer-reviewed international journals *Genetic Resources and Crop Evolution* and *International Journal of Fruit Science*.

The identified germplasm has since been multiplied through grafting and conserved at the National Active Germplasm Site of ICAR-CIARI. It has now been officially registered with the ICAR-National Bureau of Plant Genetic Resources, New Delhi, under the unique identity **INGR26027**. The registered germplasm is expected to support future crop improvement programmes and facilitate the expansion of Andaman Kokum cultivation.  Beaches & Islands

The research was carried out by Dr. Pooja Bohra and Dr. Ajit Arun Waman, Scientists at ICAR-CIARI, with funding support from the Indian Council of Agricultural Research, New Delhi. Dr. Jai Sunder, Director (A), ICAR-CIARI, expressed happiness over the achievement, describing it as a significant step towards conserving the unique biodiversity of the Andaman Islands.