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Floral chests of the Western Ghats still hold many more surprises

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NEW SCENTS AND SIGHTS: The flowering plants of the genus *Impatiens* freshly discovered in the Wayanad Part of the Western Ghats. Photos: M.S. Swaminathan Research Foundation

A recent study of the Wayanad part of the Western Ghats has once again proved that the biodiversity of the region is still not explored fully, with even higher plants waiting to be discovered.

In their latest trip, scientists from the M.S. Swaminathan Research Foundation here identified 2,100 flowering plants, seven of them fresh discoveries, including *Impatiens veerapazhassi*, *Impatiens jenkurumbae*, *Impatiens malabarica* and *Impatiens meenae*.

A species of the unique high-altitude *Ceropegia* and a genus in the milkweed family christened *Ceropegia manohari*; a wild yam named *Dioscorea longitubosa*, belonging to the genus *Dioscorea*; and a narrow-leaved under-shrub, called *Memecylon wayanadense*, belonging to the family of *Melastomataceae*, are the other new discoveries.

Miliusa wayanadica and *Miliusa gokhalae*, belonging to the *Annonaceae* family (custard apple family), and *Oberonia swaminathanii* of the orchid family were discovered in an exploration last year.

Scientists Ratheesh Narayanan, P. Sujanalal and V. Balakrishnan, assisted by five research scholars, conducted the study under the direction of N. Anilkumar, Director of the Foundation.

“Since the start of a floristic study in 1999 and a rare, endemic and threatened (RET) plant species study of Wayanad district five years ago, our scientists have identified 14 new species, six of which have been published, four accepted and the remaining are in publication,” Dr. Anilkumar told *The Hindu*.

This year's discoveries come in the second phase of a project on the RET plant species. They were financed by the Mumbai-based Sir Dorabji Tata Trust.

Impatiens veerapazhassi was found in the Kurichiarmala range of forest. Others of the genus *Impatiens* were found from the sloppy forests in the Chembra peak in the South Wayanad forest division, Dr. Narayanan said.

The four species are of the 'scapigerous' form, a rare group of *Impatiens* that appears immediately after rain and usually thrive for only a couple of months on dripping rocks or moss-covered tree trunks in evergreen forests. Twenty-two such species were reported from the Western Ghats and one from Sri Lanka, he said.

Christopher Grey Wilson, an expert from the Kew Gardens in London, had confirmed the status of the new *Impatiens* species.

Ceropegia manohari belongs to a rare plant group evoking scientific curiosity, with its many members endemic to the Western Ghats and having unusual flowers.

S.R. Yadav of the Kolhapur University, an expert in Indian species of *Ceropegia*, and David J. Goyder of Kew Herbarium, an expert in world *Ceropegia*, have confirmed its status.

Edible discovery

Wild yam *Dioscorea longitubosa* is found in the Muthanga range of forests in the Wayanad Wildlife Sanctuary. This is extremely rare in distribution and found only in the wet evergreen forests, normally an unusual habitat for wild yams. The new species serves as food for the forest-dwelling communities such as Kattunayakka. Paul Wilkin of Kew Herbarium, an expert in world *Dioscorea*, has confirmed its status.

Memecylon wayanadense, a narrow-leaved species, was discovered from the Kattimattom forest in the Vellarimala peak in the Mepadi range of forests. This species has been accepted for publication by *Rheedea*, a journal published by the India Association of Angiosperm Taxonomists. DNA studies done at the Tropical Botanical Garden and Research Institute, Thiruvananthapuram, revealed the taxonomic significance and supported the morphological evidence.

“Before we started this study, it was never expected that these many species are distributed in the Western Ghats as undiscovered, as it is one of the best-studied floristic regions of the country,” Dr. Anilkumar said.

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