

Species in Western Ghats to be barcoded

Priority project of State Council for Science, Technology

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THIRUVANANTHAPURAM: The Kerala State is set to join the global race to identify and distinguish biological species in threatened natural habitats, such as rainforests and tropical ecosystems.

The State Council for Science, Technology and Environment is preparing to embark on an ambitious project for DNA barcoding of life forms in the Western Ghats and Kerala.

Similar to the barcode that recognises an item at a supermarket, a DNA barcode is a molecular tool to identify plant and animal species. It is

widely used in taxonomy research, biodiversity studies and government regulation.

Each of the world's estimated 1.8-million species is genetically unique — its unique identity is carried in its DNA molecules. DNA barcoding rapidly sequences the DNA from a single, standardised gene on the molecule. A short DNA sequence is an abbreviated digital label for the genome of the species, and hence considered a master key to knowledge about a species.

A library of digital barcodes will provide crucial reference material to identify species invading and retreating

across the globe and through centuries of life on the planet.

Scientists describe DNA barcoding as a way of democratising the ability to identify species because it enhances public access to biological knowledge.

It also obviates the need for a taxonomist to identify a named organism. In fact, few taxonomists can critically identify more than 0.01 per cent of the estimated 10-million species on earth. According to E.P. Yesodharan, Executive Vice-President of the council, the DNA barcoding initiative is one of the priority projects for launch this year.