

New Fern Species - *Pteris madhusoodananii*

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Why in News?

A team of Indian botanists has discovered a rare new species of fern within the misty Kolli hills of the Eastern Ghats, TamilNadu.

- It was identified by researchers from Government Victoria College and Sri Vyasa NSS College in Kerala during a series of scientific expeditions in Tamil Nadu.
- **Nomenclature** - The specific epithet, *madhusoodananii*, was chosen to honour Professor Dr P. V. Madhusoodanan, the former Head of the Department of Botany at the University of Calicut.
- The discovery is particularly urgent as the species has been immediately classified as '**Critically Endangered**' due to its extremely small habitat and the threat of human encroachment.
- **Habitat** - The discovery was made during a taxonomic revision of ferns in southern India.
- While exploring the outskirts of the **Puliansolai shola forest**, the researchers noticed a fern population that didn't quite match any known records.



- It looks similar to other ferns in the *Pteris* family, *Pteris madhusoodananii* is characterised by stiff, leathery leaves with a lustrous, deep green colour.
- Unlike its closest relatives, it features a very prominent lobe at the base of its lower segments.
- It also has a unique pinna-pinnule architecture, in which its smaller leaflets are arranged along the stem.
- At a microscopic level, its spores possess a narrow, wavy-edged belt called a cingulum, a feature distinct from the smooth, wider belts found on similar species.
- **Distribution** - It is currently known to exist in only two small sites covering just eight square

kilometres.

- These areas are not officially protected and are currently threatened by road construction, logging, and the conversion of forest into farmland.
- Scientists are calling for immediate conservation efforts to save this newly discovered piece of India's natural heritage.

Reference

[Research Matters | Critically endangered fern](#)

