

3,261 flowering plant species in Agasthyamalai Biosphere Reserve

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Why is in news?

*New checklist by Keralam research team records 3,261 flowering plant species in **Agasthyamalai Biosphere Reserve (ABR)**.*

It seeks to reaffirm the global significance of the Western Ghats as a biodiversity hotspot.

High level of Endemism

- It documented 3,261 species, 26 sub-species and 28 varieties belonging to 1,139 genera and 190 families in the ABR.
- They recorded a ***“high level” of endemism*** and biogeographic affinity with Sri Lankan and even tropical American flora.
- ABR is “one of the most significant centres of angiosperm diversity and endemism in the Indian subcontinent.”
- Spread over Keralam and Tamil Nadu in the southern extremity of the Western Ghats, the “hill systems and vegetation of the ABR constitute a biologically unique, yet ecologically fragile landscape”.
- A remarkably high level of endemism was recorded, with 1018 taxa (31.2 %) endemic to India, including 245 steno-endemic taxa (confined to highly specialised habitats).
- These aspects highlight ABR as both a “refugium of ancient lineages and an active centre of speciation.”

Biogeographic affinity

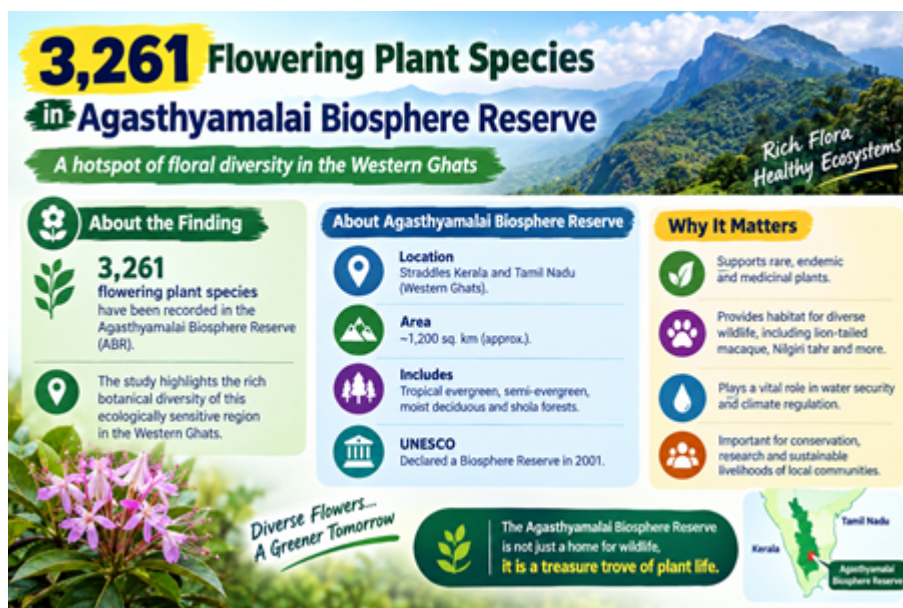
- The flora here reveals “strong” biogeographic affinity with Sri Lanka, with the two regions sharing 347 taxa.
- Reasons may range from historical land connections during periods of lower sea level, shared Gondwanan history and long-term climatic

similarities between the southern Western Ghats and Sri Lanka.

- Also interesting are 102 taxa displaying affinity with tropical American flora.
- This possibly reflects long-distance dispersal events, pan-tropical distribution patterns or naturalisation after introduction by humans.

ABR

- It is one of four biosphere reserves in south India – the others being the Nilgiri Biosphere Reserve, Gulf of Mannar Biosphere Reserve and the Seshachalam Hills Biosphere Reserve.
- Established in 2001 and Added to the **UNESCO World Network of Biosphere Reserves** in 2016
- Home to the indigenous **Kani tribal community** - one of the oldest surviving ancient tribes in the world.
- It encompasses the following wildlife sanctuaries: Shendurney Wildlife Sanctuary, Peppara Wildlife Sanctuary, Neyyar Wildlife Sanctuary, and Kalakkad Mundanthurai Tiger Reserve.



Reference

[The Hindu | 3261 Flowering Plant species](#)