

SPECIES IN NEWS

LEPTOBRACHIUM ARYATIUM

About the Newly Discovered Species – *Leptobrachium aryatium*

- The species has been named ***Leptobrachium aryatium*** to honour **Arya Vidyapeeth College**, a reputed educational institution based in Guwahati, Assam.
- It belongs to the **genus *Leptobrachium*** within the family Megophryidae, which is known for frogs that exhibit **stocky body structure, large heads, short hind limbs, and distinctive eye coloration**.
- The genus *Leptobrachium* comprises **38 scientifically described species**, distributed mainly across **South and Southeast Asia**.
- Many of the species under this genus are **morphologically similar**, making visual identification in the field challenging. Therefore, **molecular and acoustic tools** are essential for accurate species differentiation.



Key Identifying Features of *Leptobrachium aryatium*

- The species has **striking fiery orange and black eyes**, which is a unique trait distinguishing it from other related frogs.

- It exhibits a **net-like (reticulated) pattern on the throat**, which aids in its identification.
- The frog produces **smooth and rhythmic calls during dusk**, making its acoustic signature distinctive.
- The species was confirmed and differentiated using a combination of **morphological characteristics, vocalisation (acoustic) patterns, and DNA-based molecular analysis**.

About Garbhanga Reserve Forest – Habitat of the New Species

- The **Garbhanga Reserve Forest** is situated on the **outskirts of Guwahati** in Assam and serves as a significant **ecological zone rich in biodiversity**.
- It is home to a **wide variety of fauna**, including **elephants, rare butterflies, and endemic bird species**, making it an ecologically valuable site.
- The forest acts as a **"green lung" for Guwahati**, playing a crucial role in **regulating the city's microclimate and water cycles**.
- Despite its ecological importance, the forest is under serious threat from **rapid urbanisation, unplanned infrastructure development, and land-use changes**, which are causing **habitat fragmentation and biodiversity loss**.
- The discovery of *Leptobrachium aryatium* in this forest underscores the **urgent need for focused conservation efforts** in the area.

Ecological and Biogeographical Significance

- The Garbhanga forest lies within the **Indo-Burma Biodiversity Hotspot**, which is one of the most **species-rich and ecologically sensitive regions** globally.
- This hotspot is recognised for its **high species endemism and rich genetic diversity**, yet remains **underexplored scientifically**.
- The discovery of a new frog species in this region reiterates the **importance of conducting regular biodiversity surveys**, especially in ecologically threatened zones.

Source: <https://www.thehindu.com/sci-tech/science/studied-over-21-years-new-frog-species-leptobrachium-aryatium-named-after-assam-college/article69448300.ece>