

New genus of tree hole breeding frogs found in India

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An adult male of *Frankixalus jerdonii* is emerging out of a tree hole. Credit: SD Biju

Scientists describe and name a new genus of tree hole breeding frogs from India, according to a study published January 20, 2016 in the open-

access journal *PLOS ONE* by S. D. Biju from the University of Delhi and colleagues.

The Old World tree frog family currently contains over 380 species and includes some frogs with ambiguous classifications based on shared characteristics. During fieldwork in four northeastern Indian states, the authors of this study discovered several populations of tree hole breeding frogs with unusual characteristics, including tadpoles that feed on the mother's eggs. To investigate the phylogenetic relationship of these new frogs, the authors compared molecular data with known tree frog genera.

Through their analyses, they identified a previously overlooked, yet distinct evolutionary lineage of frogs that the authors recognize as a [new genus](#), *Frankixalus*. "This genus probably remained unnoticed because of its secretive life in high canopy tree holes", says Prof. S.D. Biju.

Frankixalus differs from other [tree frog](#) genera in breeding, egg laying, and development. This includes having gel-encapsulated eggs, breeding in water accumulated in tree holes, egg laying on walls of tree holes, and tadpoles that devour their mother's eggs.

"Since the new genus shows remarkable parental care behavior with specific microhabitat requirements for their survival, populations discovered from highly disturbed forests are already facing extinction threats", adds Biju. The distinctiveness of this [evolutionary lineage](#) is also corroborated by the external appearance, skeletal shape and life history features.

More information: Biju SD, Senevirathne G, Garg S, Mahony S, Kamei RG, Thomas A, et al. (2016) *Frankixalus*, a New Rhacophorid Genus of Tree Hole Breeding Frogs with Oophagous Tadpoles. *PLoS ONE* 11(1): e0145727. [DOI: 10.1371/journal.pone.0145727](https://doi.org/10.1371/journal.pone.0145727)

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