AMPHIBIANS: THE HIGHEST ENDEMIC GROUP IN WESTERN GHATS

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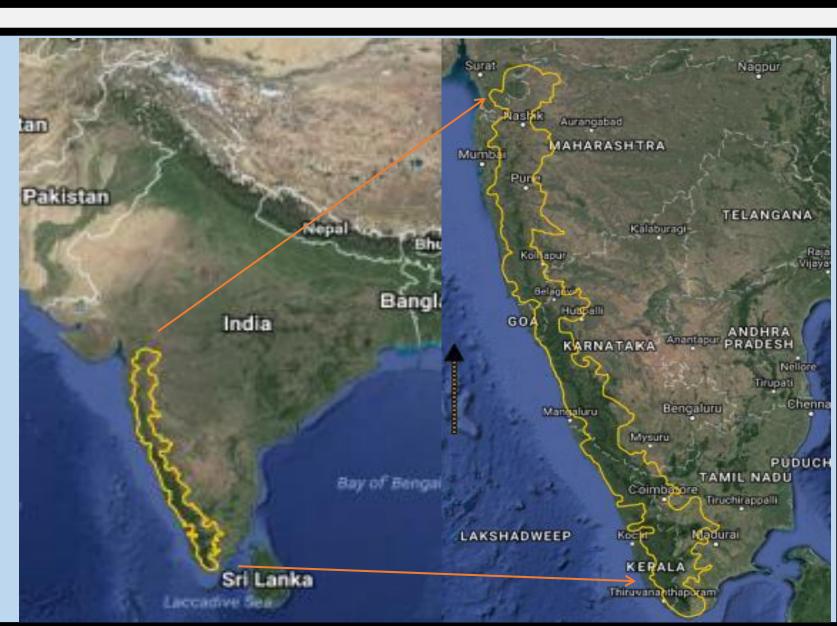
WESTERN GHATS & AMPHIBIANS

The Western Ghats is a mountain range of southwest India, considered as one of the 34 Global biodiversity hotspots and also one of the world's eight Hottest of Biodiversity Hotspots. It exhibits a great variety of vegetation comprising scrub jungles, grassland, dry and moist deciduous forests, and semi-and evergreen forests. This helps in the presence of an abundance of fauna and flora in this region. The Western Ghats montane rain forest is the home for a large number of endemic biota.

Amphibians are ectothermic, tetrapod vertebrates of the Kingdom Animalia, Phylum Chordata, Subphylum Vertebrata and class Amphibia. They can live in both aquatic and terrestrial habitats. Class Amphibia has three orders, Anura, Urodela, and Apoda. The diversified topography, geographic locations, humidity and high rainfall supports the survival of numerous amphibian species in Western Ghats. It is estimated that 6400 amphibian species are present in the world. Among that 4.4% is reported from India.

STUDY AREA

- ❖ Western Ghats extending from 8° to 22° 26' N and 72° 55' to 78° 11'E.
- It spread over an area of 1,64,280 sq.km
- Passes through the states of Gujarat, Maharashtra, Goa, Karnataka, Kerala & TamilNadu.
- Altitude ranges from 0 to 2674 m
- Annual average rainfall is 2500 mm.
- ❖ Mean temperature ranges between 20 & 24° C.



AMPHIBIAN DISTRIBUTION IN WESTERN

GHATS

Western Ghats has 248 species of Amphibians

across 383 locations. 11 families of amphibians;

Dicroglossidae,

Indotyphlidae, Micrixalidae,

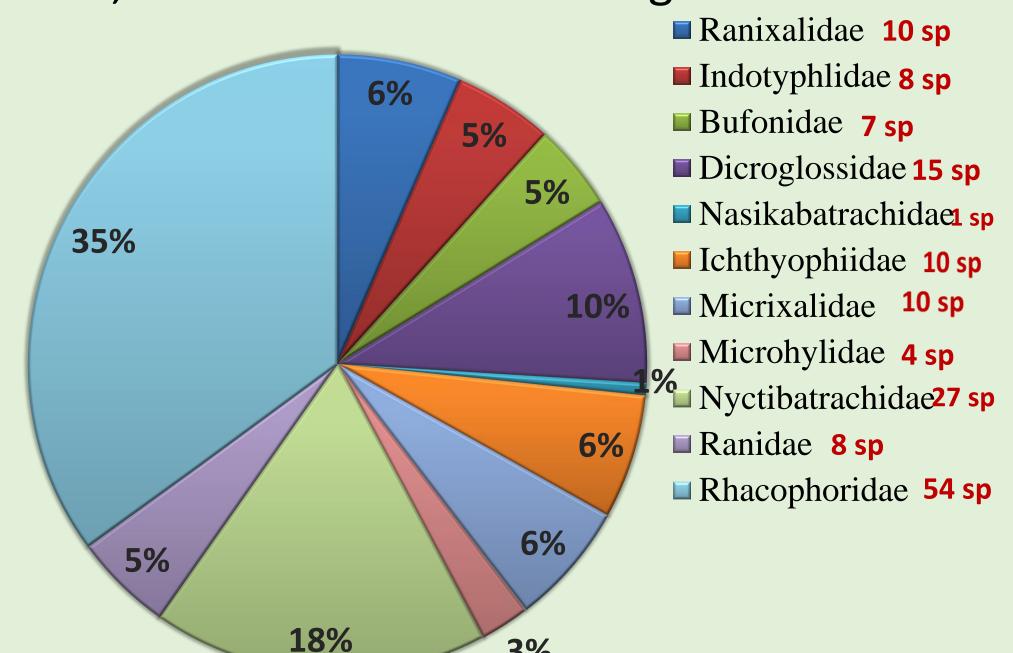
Bufonidae,

AMPHIBIANS IN WG	248 species & 11 families
Endemic	154 species
Extinct	4 species
Critically Endangered	14 species
Endangered	30 species
Vulnerable	18 species
Near threatened	7 species
Least concern	38 species
Data deficient	69 species
Not evaluated	73 species

Aurangabad IAHARASHTRA Kalaburagi , Legend Amphibians JWG BOUND Google Streets states of WG. Bengaluru LAKSHADWEEP

DISTRIBUTION OF ENDEMIC SPECIES

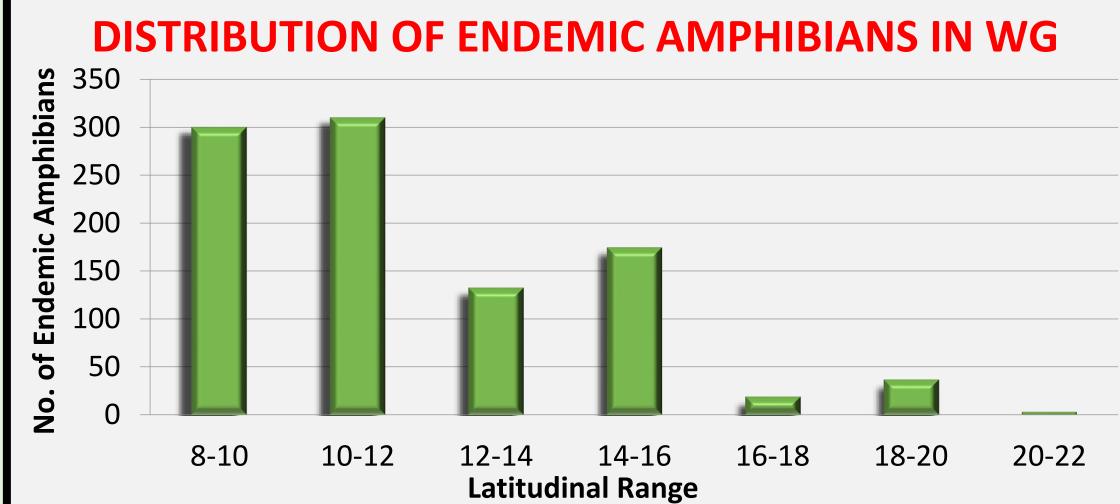
Amphibians shows highest endemism in WG. Among the 248 species, 154 species (62%) are endemic to WG. All 11 families that are present in the WG region are endemic. Majority of endemic species were reported from Tamil Nadu, Kerala and Karnataka regions WG.



Rhacophoridae family has highest endemism in WG, out of 82 species reported from WG 54 species were endemic to this region. And followed by Nyctibatrachidae family, out of 31 species, 27 are endemic to WG.

Ichthyophiidae, Microhylidae, Nasikabatrachidae, Nyctibatrachidae, Ranidae, Ranixalidae, and Rhacophoridae were reported from WG. Rhacophoridae is the largest family consists of 82 species and Nasikabatrachidae is the smallest family with only one species, Nasikabatrachus sahyadrensis. Ranixalidae is ENDEMIC TO WESTERN CHATS widely distributed family, reported across all * Bufonidae Dicroglossi dae Ichthyophiidae Indotyphlidae Micrixalidae Bengalur Microhylidae Nasikabatrachidae Nyctibatrachi dae Ranidae Ranixalidae Rhacophoridae WG BOUND Google Streets

Aurangabad





Seshadri, K.S., Gururaja, K.V. and Aravind, N.A., 2012. A new species of Raorchestes (Amphibia: Anura: Rhacophoridae) from mid-elevation evergreen forests of th

ert, B., Giri, V.B., Shouche, Y.S. and Bossuyt, F., 2012. Mountain-associated clade endemism in an ancient frog family (Nyctibatrachidae)

Ranjit Daniels, R.J., 1992. Geographical distribution patterns of amphibians in the Western Ghats, India. Journal of Biogeography (1992) 19, 521-529.

SMALLEST ENDEMIC FAMILY IN WG

Nasikabatrachidae is the smallest endemic amphibian family present in the WG. It has only one species Nasikabatrachus sahyadrensis. This species is distributed across

the regions of Karnataka, Kerala, and TamilNadu. This endangered species is commonly known as Pig-nosed Frog or Sahyadri Pig Nosed Frog.

