

A compact amphibian field guide for Kerala

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Since the last decade Western Ghats of India has witnessed a resurgence in amphibian taxonomy with the description of many new species and family (e.g., Biju & Bossuyt, 2003; Abraham et al. 2013). Researchers have reported unique evolutionary radiations, distinct evolutionary elements and some distinct behavioral adaptations in amphibians of this region. Being the most populated and fragmented biodiversity hotspot, amphibians of the Western Ghats are more threatened by habitat degradation, restricted range of distribution and fungal infection (Dahanukar et al. 2013; Padhye et al. 2013). Amphibians have been considered as good bio-indicators for predicting environmental changes at regional as well as at global context. Especially in the recent years, description of many enigmatic amphibian species across the Western Ghats has received more public attention. Along with scientific descriptions field guides on morphologically identifiable taxa are substantially useful for researchers, layperson, amateur naturalists and photographers. Along with familiarizing people with surrounding biodiversity and enriching their interest in natural history study, field guides also help in conservation and management practices at regional scale. The “Pictorial Guide to Frogs and Toads of the Western Ghats” and android application “Frog Find” (a heavy application) by K.V. Gururaja are some recent good attempts in Western Ghats for popularizing this group in the public domain.

The recent book “*Common Amphibians of Kerala (Frogs and Toads)*” published by P. S. Sivaprasad in 2013 drew my attention. I feel it is a highly appreciable effort made by the author and the Kerala State Biodiversity Board. The author communicates well with the reader in popularizing the regional amphibian diversity of Kerala State. I have discussed some of the strengths and weaknesses of this book.

The book provides an account of 82 amphibian species found in Kerala part of Western Ghats with nice field photographs and key species diagnostic features. This book has a commentary on scientific and common names of species, size, morphological features and district wise distribution across the state, and IUCN threat status. Efforts have been made in this book to

give an account on possible regional threats to the species. The author provides good photographs for the species with scale and its diagnostic morphological features like skin color, dorsum pattern, tympanum, toe etc. The text is simple and



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Common Amphibians of Kerala (Frogs and Toads)

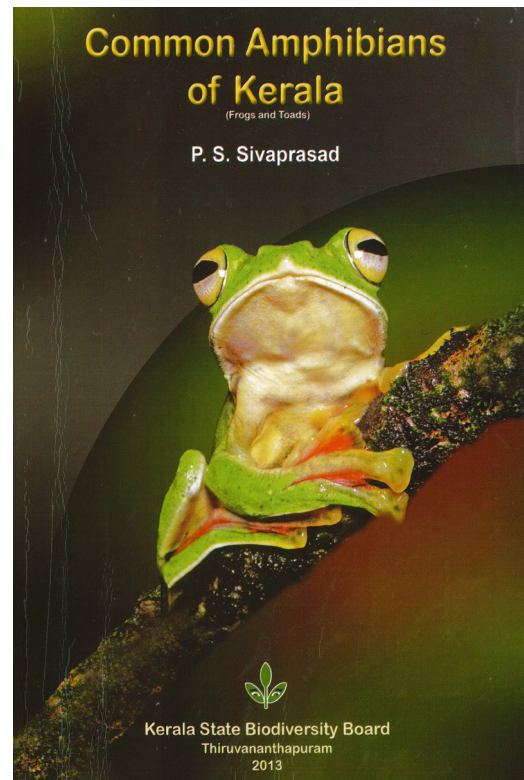
P.S. Sivaprasad

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introduces the reader to identification of amphibian species at family and genus level through detail account on marked distinguishable characters.

Mostly positive, there are a couple of issues that the author can address in the next edition, if any. The

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author uses the old generic name *Fejervarya* instead of *Zakerana*, which is the valid genus (Howlader 2011; Frost 2014). Some species have the wrong IUCN threat status, e.g., *Raorchestes jayarami* (Biju & Bossuyt, 2009) and *Raorchestes nerostagona* (Biju & Bossuyt, 2005). In the book IUCN status of *Raorchestes jayarami* is given as Data Deficient (DD) when in fact the species is still not assessed on the IUCN Red List, therefore the species should be treated as non assessed (NA). *Raorchestes nerostagona* has been represented as Data Deficient (DD) whereas according to the IUCN the status is Endangered (EN). Along with correct use of IUCN threat status it is also expected that the book should carry the citation of IUCN for threat status use. Apart from these few points the book is very well written and I did not find any mistakes in species names or glaring typographical errors.

Apart from available scientific information the book delivers much good unpublished and important information. Though the available IUCN threat status of the species like *Raorchestes travancoricus* (Boulenger, 1891) is Extinct (EX), the book clearly points that there are extant populations of this species in Idukki District of Kerala. The book also delivers good information regarding when the species was described, common name and its habitat preferences with some natural history notes. I admire this book for readers as it is one of the best field guide for identification of amphibians in Kerala part of Western Ghats. Field guides like this book are needed from other parts of Western Ghats. This

book along with the *Pictorial Guide to Frogs and Toads of the Western Ghats* by K.V. Gururaja are good attempts at providing simple and usable field guides that other states can emulate.

References

- Abraham, R.K., R.A. Pyron, B.R. Ansil, A. Zachariah & A. Zachariah (2013). Two novel genera and one new species of treefrog (Anura: Rhacophoridae) highlight cryptic diversity in the Western Ghats of India. *Zootaxa* 3640: 177–189; <http://dx.doi.org/10.11646/zootaxa.3640.2.3>
- Biju, S.D. & F. Bossuyt (2003). New frog family from India reveals an ancient biogeographical link with the Seychelles. *Nature* 425: 711–714; <http://dx.doi.org/10.1038/nature02019>
- Biju, S.D. & F. Bossuyt (2005). A new species of frog (Ranidae, Rhacophorinae, Philautus) from the rainforest canopy in the Western Ghats, India. *Current Science* 88 (1): 175–178.
- Biju, S.D. & F. Bossuyt (2009). Systematics and phylogeny of Philautus Gistel, 1848 (Anura, Rhacophoridae) in the Western Ghats of India, with descriptions of 12 new species. *Zoological Journal of the Linnean Society* 155: 374–444.
- Dahanukar, N., K. Krutha, M.S. Paingankar, A.D. Padhye, N. Modak & S. Molur (2013). Endemic Asian chytrid strain Infection in threatened and endemic anurans of the northern Western Ghats, India. *PLoS ONE* 8(10): e77528; <http://dx.doi.org/10.1371/journal.pone.0077528>
- Frost, D.R. (2014). Amphibian Species of the World: an Online Reference. Version 6.0 (Date of access). Electronic Database accessible at <http://research.amnh.org/herpetology/amphibia/index.html>. American Museum of Natural History, New York, USA.
- Howlader, M.S.A. (2011). Cricket frog (Amphibia: Anura: Dicroglossidae): two regions of Asia are corresponding two groups. *Bangladesh Wildlife Bulletin* 5: 1–7.
- Padhye, A.D., A. Sayyed, A. Jadhav & N. Dahanukar (2013). *Raorchestes ghatei*, a new species of shrub frog (Anura: Rhacophoridae) from the Western Ghats of Maharashtra, India. *Journal of Threatened Taxa* 5(15): 4913–4931; <http://dx.doi.org/10.11609/JoTT.o3702.4913-31>

