



Systematics of the genus *Rhacophorus* (Amphibia, Anura): identity of red-webbed forms and description of a new species from Assam

SABITRY BORDOLOI,¹ TUTUL BORTAMULI² & ANNEMARIE OHLER³

¹ Resource Management and Environment Division, Institute of Advanced Study in Science and Technology, Paschim Boragaon, Guwahati -781035

² Department of Zoology, Gorgaon College, Sibsagar, Assam

³ Muséum National d'Histoire Naturelle, Département de Systématique et Evolution, USM 602 Taxinomie et Collection, 25 rue Cuvier, 75005 Paris, France

Abstract

The taxonomic status of *Rhacophorus maculatus* Anderson, 1871 and its replacement names (alloneonyms) *Rhacophorus bimaculatus* Boulenger, 1882 and *Rhacophorus bipunctatus* Ahl, 1927 is assessed and a lectotype (lectophoront) for this nomen is designated. Morphological evidence supports the nomen *Rhacophorus htunwini* Wilkinson *et al.*, 2005 being a junior subjective synonym of *Rhacophorus maculatus* Anderson, 1871. *Rhacophorus rhodopus* Liu & Hu, 1960 is considered a valid nomen with a new junior subjective synonym, *Rhacophorus namdaphaensis* Sarkar & Sanyal, 1985. A new species of red-webbed *Rhacophorus* is described which can be distinguished by the other species by the presence of web between fingers, green dorsal coloration and red web on feet, the absence of blackish spots on web and on flanks, the absence of complete web between fingers and the absence of distinct dermal appendages on forelimbs, tarsi and feet. A key to the red-webbed species of *Rhacophorus* is given.

Key words: taxonomy, Amphibian, treefrogs, key, South-East Asia

Introduction

The amphibian genus *Rhacophorus* Kuhl & Van Hasselt, 1826 is a monophyletic group (Wilkinson *et al.* 2002; Frost *et al.* 2006) of about 60 species with granular skin on belly and webbing between fingers. Most of these frogs have never been revised since Wolf's (1936) work, despite the recent description of several new taxa.

The discovery of a moderate-sized green coloured *Rhacophorus* with red webbing on feet collected from the neighbouring areas of Suffry tea estate in Assam (India) led us to re-evaluate the status of several nomina available for species group taxa with red web on feet in the genus *Rhacophorus*. The specimens referred to these taxa probably do not form a phylogenetic group but can easily be recognized by this character. Their dorsal colour is variable, green or brown in life.

Among the treefrogs occurring in the Indochinese region of South-East Asia, the following nominal species show red web on feet and green dorsal colour, and thus should be compared to the newly discovered specimens: *Rhacophorus bipunctatus* Ahl, 1927, *R. htunwini* Wilkinson *et al.*, 2005, *R. kio* Ohler & Delorme, 2006, *R. malabaricus* Jerdon, 1870, *R. reinwardtii* (Schlegel, 1840), *R. rhodopus* Liu & Hu, 1960 and *R. yaoshanensis* Liu & Hu, 1962. Recently *R. rhodopus* was considered a synonym of *R. bipunctatus* by Inger *et al.* (1999). We will reconsider this synonymy. Based on a similar concept for *R. bipunctatus*, Wilkinson *et al.* (2005) described a new species from Myanmar which will here be compared to the taxa described earlier.