



A new low altitude species of *Megophrys* Kuhl and van Hasselt (Amphibia: Megophryidae), from Assam, Northeast India

STEPHEN MAHONY¹, SAIBAL SENGUPTA², RACHUNLIU G. KAMEI¹ & S.D. BIJU^{1,3}

¹Systematics Lab, Department of Environmental Studies, University of Delhi, Delhi 110 007, India

²Department of Zoology, Arya Vidyapeeth College, Guwahati, Assam 781 016, India

³Corresponding author. E-mail: sdbiju@cemde.du.ac.in

Abstract

Northeast Indian amphibian systematics and taxonomy is receiving increasing interest from herpetologists in recent years as remote, previously unexplored areas become more accessible for surveying. Even locations nearby cosmopolitan cities have the potential to produce taxonomic novelties. Herein we describe a new species of *Megophrys* from the foot-hills of the East Khasi Hills, northern Meghalaya, and adjacent forest in Garbhanga Reserve Forest, and Mayeng Hill Reserve Forest nearby the city of Guwahati, southern Assam. *Megophrys megacephala* **sp. nov.** is here compared with all Asian mainland congeners. This species altitudinal distribution is the lowest of all known *Megophrys* described from India and surrounding countries. A brief discussion is provided regarding some of the current difficulties faced by taxonomists working on the genus and several major problems in recent descriptions of congeners from Northeast India.

Key words: *Xenophrys*, taxonomy, *Megophrys megacephala*, new species, Northeast India

Introduction

Northeast India has within India the unique distinction of comprising of two biodiversity hotspots, Himalaya and Indo Burma, which represent one of the richest biodiversity hotspots in the world (Mittermeier *et al.* 2004). During the past eleven years, several important discoveries of new vertebrates have been published from Northeast India, including several reptile species (Das & Sengupta 2000; Slowinski *et al.* 2001; Fritz *et al.* 2008; Mahony 2009), a large primate, *Macaca munzala* (Sinha *et al.* 2005) and a small bird, *Liochichla bugunorum* (Athreya 2006) from Arunachal Pradesh. The amphibian fauna of Northeast India was largely neglected taxonomically since the works of pre-independence herpetologists who collectively described 38 currently valid species (e.g., Anderson 1871; Annandale 1912, 1915; Boulenger 1908, 1919, 1920; Jerdon 1870). The following 52 years (1947–1999), sporadic descriptions added only eleven further species from the region (Frost 2011). Since 2000, a dramatic increase of interest in Northeast Indian amphibian taxonomy has resulted in the descriptions of 32 new species of anurans and caecilians, indicating that further novelties are yet to be discovered from this biologically rich region (Biju *et al.* 2010; Bordoloi *et al.* 2007; Das & Chanda 2000; Das *et al.* 2004, 2010; Kamei *et al.* 2009; Mathew & Sen 2007, 2009a, b, c; Ohler *et al.* 2009; Orlov *et al.* 2006; Sarkar & Ray 2006; Sengupta *et al.* 2008, 2010; Sondhi & Ohler 2011).

Species allocation amongst the variously recognised genera within the megophryid subfamily Megophryinae is a matter of some considerable debate. The validity of the genus *Xenophrys* has not been adequately proven or morphologically diagnosed from the paraphyletic genus *Megophrys* (Stuart *et al.* 2006; Fei *et al.* 2009; Mahony 2011). We follow the aforementioned authors for the placement of *Xenophrys* species in the genus *Megophrys sensu lato* pending a molecular phylogenetic review of this complicated group that contains the type species of both genera. *Megophrys s.l.* is composed primarily of mid to high altitude dwelling species distributed from Dehra Dun, Uttarakhand, northwest India, east along the southern slopes of the Himalayas to eastern China, north to Sichuan, China and south through Southeast Asia to Indonesia (Fei 1999; Inger & Iskandar 2005; Orlov *et al.* 2002; Ray 1997). As