



A new dwarf forest toad (Amphibia: Bufonidae: *Nectophrynoidea*) from the Ukaguru Mountains, Tanzania

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Abstract

A new species of *Nectophrynoidea* from the Ukaguru Mountains, Eastern Arc Mountains Tanzania, is described. The new species is diagnosed by the presence of large prominent spines with keratinized tips, positioned on the dorsum, head and limbs. In addition, the combination of the following characters - presence of large tympanum and annulum, foot longer than tibia, the lack of parotoid glands and advertisement call features, allow this species to be distinguished from all other species in the genus. The new species adds to our understanding of the relatively undersampled and poorly understood, amphibian fauna of the Ukaguru Mountains.

Key words: *Nectophrynoidea*, Ukaguru Mountains, Eastern Arc, Biodiversity hotspot, Tanzania

Introduction

The genus *Nectophrynoidea* Noble, 1926 is confined to the sub-montane and montane moist forests of the Eastern Arc Mountains and the Southern Highlands of Tanzania. The genus was established by Noble (1926) to accommodate the dwarf toad *Nectophryne tornieri*, described by Roux in 1905 and subsequently the toad *Pseudophryne vivipara* described by himself in 1906. The new genus was separated from other bufonid genera based on presence of an omosternum, T-shaped but not flattened or spatulated phalanges, and by the 'viviparous' (ovoviviparous as in Duellman and Trueb, 1986) mode of reproduction. Since the description of *N. viviparus* (Noble, 1926) another ten species have been described: *N. cryptus* Perret, 1971; *N. minutus* Perret, 1972; *N. wendyae* Clarke, 1988; *N. asperginis* Poynton *et al.* 1998, *N. vestergaardi*, *N. pseudotornieri*, *N. frontierei*, *N. laevis*, *N. poyntoni* Menegon *et al.* 2004 and finally *N. laticeps* Channing *et al.* 2005. Despite the relatively rapid increase in the number of *Nectophrynoidea* species described over the last 20 years, diagnosis of *Nectophrynoidea* Noble 1926, and therefore its content still remains unsatisfactorily resolved (Clarke, 2001; Menegon *et al.* 2004). This in spite of significant contributions made by Grandison (1978) and Wake (1980) to understand the morphology and reproductive biology of African bufonids (Clarke, 1988).

Although there remain some difficulties in assigning new species to genus *Nectophrynoidea* (*sensu* Dubois, 1987 (1986)), here we describe a species of *Nectophrynoidea* found in the Ukaguru Mountains during an amphibian and reptile survey in January 2004. The new species is compared with all other currently recognised species, using mainly morphology and call characteristics. Further work on the genus will be needed to clarify the phylogenetic relationships of these species, and its corresponding classification.