



Dusted off—the African *Amietophrynus superciliaris*-species complex of giant toads

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Abstract

Amietophrynus superciliaris is known to occur in rain forests from West Africa to eastern Democratic Republic of Congo and Gabon. We herein present morphological and molecular data indicating the existence of three distinct taxa. The name *A. superciliaris superciliaris* is restricted to toads from the western Lower Guinean Forest (eastern Nigeria, Cameroon, Equatorial Guinea, Gabon). We resurrect *A. s. chevalieri* for the Upper Guinean forest (Sierra Leone, Guinea, Liberia, Ivory Coast, Ghana) and describe a new species occurring in the eastern part of the Lower Guinean Forest (eastern Democratic Republic of Congo). *Amietophrynus channingi* **sp. nov.** from eastern Lower Guinean Forest differs from both other taxa by its brownish lateral coloration (reddish-purple in the other taxa). The new species differs morphologically from western Lower Guinean *A. s. superciliaris* by a less pointed eyelid process, a dark coloured posterior abdominal region and a dark coloured vertebral line (both absent in *A. s. superciliaris*), the shape of the parotid glands (bulged and rounded at the posterior tip in the new species, slender drop shaped and pointed at the posterior tip in *A. s. superciliaris*), and juvenile interorbital markings (V-shaped in the new species, usually interrupted and broken in *A. s. superciliaris*). *Amietophrynus channingi* **sp. nov.** differs from the Upper Guinean *A. s. chevalieri* by the presence of an eyelid process (absent in *A. s. chevalieri*), presence of a dark vertebral line and a pair of dark spots on the posterior part of the back (both absent in *A. s. chevalieri*). The Upper Guinean *A. s. chevalieri* differs from western Lower Guinean *A. s. superciliaris* by the absence of an eyelid process, a dark coloured posterior abdominal region (absent in *A. s. superciliaris*) and lacking a pair of dark spots in the posterior part of the back (present in *A. s. superciliaris*). The new species differs from both other taxa by 2.2–2.8% in the investigated 16S rRNA gene. West African and western Central African populations differ by only 0.9–1.1% in 16S rRNA, lacking any intra-taxon variation within each clade, and are cautiously regarded as subspecies although the genetic distinction is mirrored by strong morphological differences and distinct geographic distribution which may support its elevation to species status once that more comprehensive data become available. A key to the taxa of the *A. superciliaris*-species complex is provided.

Key words: *Amietophrynus channingi* **sp. nov.**, *A. superciliaris chevalieri*, *A. s. superciliaris*, West & Central Africa

Introduction

The African bufonid genus *Amietophrynus* comprises 39 species (Frost 2010) including species of small to large size and species inhabiting habitats ranging from humid rain forests to arid semi-deserts. The largest African toad, *Amietophrynus superciliaris* (Boulenger, 1888 “1887”), is regarded as a species of the African equatorial rain forests and gallery forests, occurring roughly from Guinea in West Africa (Upper Guinea) eastwards to Gabon and to northeast Democratic Republic of Congo (West and East Lower Guinea; e.g. Orts 1970; Lawson 1993; Rödel & Bangoura 2004a). Regarding known localities the overall distribution exhibits gaps and thus indicates a disjunct distribution (Tandy & Keith 1972; Böhme 1994; Fig. 1).