



<http://dx.doi.org/10.11646/zootaxa.3635.3.1>

<http://zoobank.org/urn:lsid:zoobank.org:pub:E9955681-99A8-4618-A4CC-DD838F4294CE>

Fifty Shades of Grey: giving colour to the poorly known Angolan Ashy reed frog (*Hyperoliidae*: *Hyperolius cinereus*), with the description of a new species

WERNER CONRADIE^{1,2,6}, WILLIAM R. BRANCH^{1,3} & KRYSTAL A. TOLLEY^{4,5}

¹Port Elizabeth Museum, P.O. Box 13147, Humewood, Port Elizabeth 6013, South Africa

²South African Institute for Aquatic Biodiversity, P/Bag 1015, Grahamstown 6140, South Africa

³Department of Zoology, P.O. Box 77000, Nelson Mandela Metropolitan University, Port Elizabeth 6031, South Africa

⁴Applied Biodiversity Research Division, South African National Biodiversity Institute, P/Bag X7, Claremont 7735, South Africa

⁵Department of Botany & Zoology, Stellenbosch University, P/Bag X1, Matieland 7602, South Africa

⁶Corresponding author. E-mail: werner@bayworld.co.za

Abstract

Phylogenetic reconstruction using the mitochondrial 16S marker shows that geographically separated populations of the poorly known *Hyperolius cinereus* (Anura: Hyperoliidae) from Angola form two distinct clades. The description of *H. cinereus* was originally based on only a single preserved adult male. Fresh material of both sexes allowed a detailed redescription of the species, which is restricted mainly to the south-draining Cunene and Cubango river systems. Bioacoustic and morphological characters, in conjunction with colouration differences, allow the description of a cryptic sister species from Lagoa Carumbo in north-eastern Angola, occurring in the Luele and Lovuo river systems of the Congo drainage basin. Tadpoles, for *H. cinereus* and the new species, are described.

Key words: Amphibia, *Hyperolius raymondi* sp. nov., endemism, cryptic species

Introduction

The genus *Hyperolius* Rapp, 1842 is the most speciose African amphibian genus (Poynton 1999), with more than 120 recognised species (Frost 2011). Frost (2011) lists 23 *Hyperolius* species known from Angola (excluding the Cabinda enclave, which is politically part of Angola but lies to the north of the Congo River and shows greater affinities to Congo biodiversity), with another recently added (Conradie *et al.* 2012a). The taxonomic status and evolutionary relationships of many Angolan hyperoliid species are unclear; whilst others await rediscovery or re-examination since their original descriptions (Conradie *et al.* 2012a).

Monard (1937) described *Hyperolius cinereus* from south-western Angola [*terra typica*: “Kalukembe” (= Calaquembe), Angola] (Fig. 1). The description is terse and based on only one preserved adult male specimen in the Musée d’Histoire Naturelle, La-Chaux-de-Fond, Switzerland. The dorsum is described as being ash-coloured and the ventrum whitish (thus bicolour). Hellmich (1957) referred to a small collection from Entre Rios, Benguela Province, as *H. cinereus*. Later, Laurent (1964) also assigned a small collection of specimens from Dundo, Lunda Norte Province (Fig. 1) to Monard’s *H. cinereus*, although his description of the preserved material (Laurent 1964) differs from that of Monard (1937), with males dorsally more pigmented than females and with two dark longitudinal stripes that converge toward the snout and which only reach the level of the eyes. Monard (1937) makes no reference to dorsal markings in the southern population. Presumably Laurent considered these differences in colouration to reflect intraspecific variation, although he does not make this point. Both Schiøtz (1999) and Channing (2001) assigned all these collections to Monard’s *H. cinereus*. They described the colour to be pale above and blue-grey below, however this is in error as Monard (1937) and Laurent (1964) clearly state blue-grey above and pale below.