Amietia angolensis and A. fuscigula (Anura: Pyxicephalidae) in southern Africa: A cold case reheated

ALAN CHANNING1 & NINDA BAPTISTA2
1Biodiversity and Conservation Biology Department, University of the Western Cape, Private Bag X17, Bellville, 7535, South Africa
2Centro de Biologia Ambiental, Departamento de Biologia Animal, Faculdade de Ciências da Universidade de Lisboa, Bloco C2, Campo Grande, 1749-016 Lisbon, Portugal

Abstract
A study combining DNA sequences of the mitochondrial 16S rRNA gene, advertisement calls and morphology of some southern African river frogs confirms Amietia vandijki (Visser & Channing, 1997) as a good species. The form presently referred to as Amietia angolensis in southern Africa is shown to comprise two species: Amietia angolensis (Bocage, 1866) known from Angola, and Amietia quecketti (Boulenger, 1895) known from South Africa, Zimbabwe and Lesotho. Junior synonyms of A. quecketti include Rana theileri Mocquard, 1906 and Afrana dracomontana Channing, 1978. The form presently known as Amietia fuscigula is shown to consist of two distantly related taxa: Amietia fuscigula (Duméril & Bibron, 1841) from the south-western Cape and an undescribed species that we here name Amietia poyntoni sp. nov. Channing & Baptista, known from the rest of South Africa and Namibia. These five species have large differences in 16S sequences, as well as differences in morphology and advertisement call. Call and molecular data are both diagnostic, while morphology shows some overlap between taxa. An extended study of the genus across Africa is in preparation.

Key words: Amphibia, Anura, Pyxicephalidae, Amietia, taxonomy, southern Africa, Amietia quecketti, Amietia poyntoni sp. nov.

Introduction
The last comprehensive revision of the taxonomy of southern African amphibians (Poynton 1964) drew attention to the long-standing debate on the status of Amietia angolensis (Bocage, 1866) and Amietia fuscigula (Duméril & Bibron, 1841). Poynton (1964) separated these two species on body proportions, with A. angolensis possessing a narrower head and less mottling of the ventral surface.

Concerning A. angolensis Poynton "attached a certain amount of doubt" to the recognition of Rana delalandii Duméril & Bibron, 1841 from South Africa as a synonym of Rana angolensis by Boulenger (1882). The name Rana delalandii became a secondary homonym of Pyxicephalus delalandii Tschudi, 1838 (= Tomopterna delalandii) in Rana (Frost 2013), and is now an unavailable name according to Article 59.3 of the Code. Poynton agreed with the status quo that Rana theileri Mocquard, 1906 from Nelspruit in South Africa was a junior synonym of A. angolensis.

Concerning A. fuscigula, Poynton (1964) recognised Amietia fuscigula as distributed across South Africa, with Rana quecketti Boulenger, 1894 from Pietermaritzburg, as a junior synonym following Boulenger (1910). In a later paper Boulenger (1918) placed Rana quecketti in the synonymy of Rana angolensis. Current taxonomy follows Poynton (1964) in respect of the contents of A. angolensis and A. fuscigula (e.g. Channing 1979, Frost et al. 2006).

Other southern African species of Amietia include Amietia dracomontana, which was described from the Drakensberg in South Africa (Channing 1978) and A. vandijki (Visser & Channing 1997) known from three mountain ranges in the Western Cape Province of South Africa (IUCN SSC 2010). The identification of A. umbraculata and A. vertebralis on the mountains of Lesotho has been reviewed (Tarrant et. al. 2008, Clarke & Poynton 2012), and these species will be included in the extended study.