



A distinctive new species of chameleon of the genus *Furcifer* (Squamata: Chamaeleonidae) from the Montagne d’Ambre rainforest of northern Madagascar

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Abstract

We describe *Furcifer timoni* **sp. nov.**, a new colourful and morphologically highly distinct chameleon from Montagne d’Ambre National Park in northern Madagascar. Males of this rainforest species are characterized by short paired bony rostral appendages which are completely absent in females. The new species differs from all other *Furcifer* species except *F. bifidus* (Brongniart, 1800) and *F. balteatus* (Duméril & Bibron, 1851) by a light ventrolateral band that is composed of scales which are arranged in a rosette-like manner. It differs from *F. bifidus* and from *F. balteatus* by smaller size, shorter rostral appendages of the males, and colouration. We suspect that *F. timoni* may be a cryptic species of the forest canopy. Furthermore, we designate a lectotype for *Dicranosaura bifurca* var. *crassicornis* Gray, 1864 and confirm its synonymy with *Furcifer bifidus*.

Key words: Squamata, Chamaeleonidae, *Furcifer timoni* **sp. nov.**, Madagascar

Introduction

Madagascar is the hotspot of chameleon species diversity. Recent molecular studies suggest that chameleons evolved on this microcontinent and later colonized Africa and the islands in the Indian Ocean by oversea dispersal (Raxworthy *et al.* 2002; Rocha *et al.* 2005). The three Malagasy genera *Brookesia*, *Calumma*, and *Furcifer* include almost 50% of the world’s chameleon species, including the biggest and the smallest. The chameleon genus *Furcifer* is currently composed of 19 species which are distributed over Madagascar and the Comoro islands (Glaw & Vences 2007). In contrast to the genera *Brookesia* and *Calumma*, many *Furcifer* species inhabit relatively arid regions in western Madagascar and only a few are exclusively found in rainforest areas. Intensive herpetological fieldwork and taxonomic revisions during the past 15 years have led to a strong increase in the number of species in the genera *Brookesia* and *Calumma* (Raxworthy & Nussbaum 1995; Schimmenti & Jesu 1996; Böhme 1997; Glaw *et al.* 1999; Andreone *et al.* 2001; Raxworthy & Nussbaum 2006). Modelling of distribution areas based on remote sensing data has further predicted the discovery of new chameleon species (Raxworthy *et al.* 2003). In *Furcifer*, some species like *F. pardalis* (Cuvier, 1829), *F. oustaleti* (Mocquard, 1894) and *F. lateralis* (Gray, 1831), show a significant geographic variation in colour and/or molecular characters, indicating the possible presence of still unrecognized taxa (e. g. Boumans *et al.* 2007). Nevertheless, only a single new species of *Furcifer* has been described subsequent to 1972 (Jesu *et al.* 1999), indicating that the species inventory of this genus might have been largely completed.