

A new, isolated population of *Oplurus* (Iguanidae) from Tsingy de Bemaraha National Park, western Madagascar

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The iguanid lizard genus *Oplurus* contains six species of which five are endemic to Madagascar and the sixth occurs also on Grande Comoro (Glaw and Vences, 2007). It comprises two distinct lineages; the spiny-tailed, arboreal species (*O. cyclurus* and *O. cuvieri*) are distributed throughout the dry south and west of the country, while the four rock-dwelling (saxicolous) species (*O. fierinensis*, *O. grandidieri*, *O. quadrimaculatus* and *O. saxicola*) are restricted to the south and southern highlands (Cadle, 2003; Münchenberg et al., 2008). No saxicolous species are known from central western Madagascar, and *O. cuvieri* is the only member of the genus hitherto recorded from Tsingy de Bemaraha National Park (Raselimanana 2008; Bora et al., 2010).

Here we present observations and photographs of an unidentified juvenile *Oplurus* (Fig. 1) from Tsingy de Bemaraha National Park in the central-west of Madagascar, and discuss the possibility that it represents an undescribed taxon. The Bemaraha Plateau on which the National Park stands is composed of limestone from the mid-Jurassic, heavily eroded into spectacular karst landscapes largely devoid of vegetation (Rasoloarison and Paquier, 2003). The specimen was observed on 25.09.2010 at 08:13, at a site known as 'Grande Tsingy' (19.029° S, 44.781° E), the primary tourist attraction of the National Park. The animal was observed basking near the top of the limestone pinnacles, at least 10 m from the nearest vegetation. Although identification of juvenile *Oplurus* is complicated by the lack of published accounts of the juveniles of most species, the

observed individual clearly belongs to the saxicolous clade by the absence of transversal rings of large spiny scales on the tail, and the depressed body shape. The numerous transversal black bands on the dorsum allow an easy distinction from adult *O. fierinensis* (uniformly greyish without dark dorsal bands), *O. grandidieri* (with light middorsal band), and *O. saxicola* (different colour pattern) whereas *O. quadrimaculatus* apparently has a less flattened body.

The nearest known populations of saxicolous *Oplurus* to Tsingy de Bemaraha are those of *O. quadrimaculatus* from the central highlands and *O. grandidieri* from the southern highlands, a distance of approximately 240 km and 280 km respectively (calculated using Google Earth based on distribution maps from Glaw and Vences, 2007). Given the extremely high rates of local endemism on the Bemaraha Plateau (28% of recorded herpetofauna are endemic to the massif, Bora et al., 2010), this specimen may represent an undescribed and possibly locally-endemic taxon. Further, the presence of a saxicolous species of *Oplurus* on the Bemaraha Plateau is biogeographically surprising as the reptiles of the massif show strong biogeographical affinities with the north and northwest of Madagascar (Bora et al., 2010; Glaw et al., 2009), while the saxicolous *Oplurus* species are concentrated in the south.

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Figure 1. Juvenile *Oplurus* sp. from Tsingy de Bemaraha National Park.

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