Herpetology Notes, volume 5: 151-153 (2012) (published online on 4 May 2012)

A new record of the phantom gecko *Matoatoa spannringi* from Sainte Luce, SE Madagascar augments the species' known range

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The gekkonid genus *Matoatoa* currently consists of two species endemic to Madagascar: *Matoatoa brevipes* Mocquard (1900) and *M. spannringi* Nussbaum, Raxworthy and Pronk 1998. While *M. spannringi* occupies rainforest habitats in the eastern part of Madagascar, *M. brevipes* lives in the arid spiny forests located in the southwest of the island (Glaw and Vences, 2007). Examples of similar east-west vicariance among related Madagascan reptiles are not uncommon (Boumans et al., 2007). The two species within the genus *Matoatoa* are often called ghost geckos due to their cryptic habits and peculiar morphology. Notably, life history information and distribution data regarding *M. spannringi* is lacking. Previous documentation provided only a single distribution record located between the communes of Ambohimanana and Fiadanana (S21°28.61', E47°33.83', 690 m elevation), at which the type series was collected (Nussbaum, Raxworthy and Pronk, 1998). Hence, *M. spannringi* is currently listed as ´Critically Endangered´ on the IUCN Red List (Raxoworthy et al., 2011).

The current paper provides a new record for *M. spannringi* from Sainte Luce, southeastern Madagascar. We also provide a morphological description of *M. spannringi* based on the recorded specimen.

During a survey carried out in a forest fragment in Sainte Luce, Southeast Madagascar (S24°46.642, E047°08.913) an individual attributed to *M. spannringi* was found on 9th March 2011 at 19:45. The forest fragment was rather degraded and there was evidence of logging in the area. The gecko was found on a *Pandanus* tree with thin leaves (Fig. 1). The *Pandanus* was 980 mm in height and approximately the same in width. Former records have documented the species inhabiting holes in one particular species of small to medium sized tree (Glaw and Vences, 2007). Canopy cover at the site was open and weather conditions were clear. The individual showed nocturnal activity, which is in agreement with observations made of individuals in captivity (Glaw and Vences, 2007). The record of *M. spannringi* from Sainte Luce so far represents the first finding of this species in the area and extends the distribution range by over 350 km from the nearest previously recorded locality, Fiadanana (Fig. 1) (Nussbaum, Raxworthy and Pronk, 1998).

The individual was not collected, but biometric measurements were taken with a digital caliper: total length = 102.8 mm; tail length = 50.5 mm; snout vent length = 52.7 mm. The mental scale was divided, with

Figure 1. The previous known distribution for *Matoatoa spannringi,* represented by a blue star. The green star shows the new locality for the species (Map adapted from Google Earth images, 2012).

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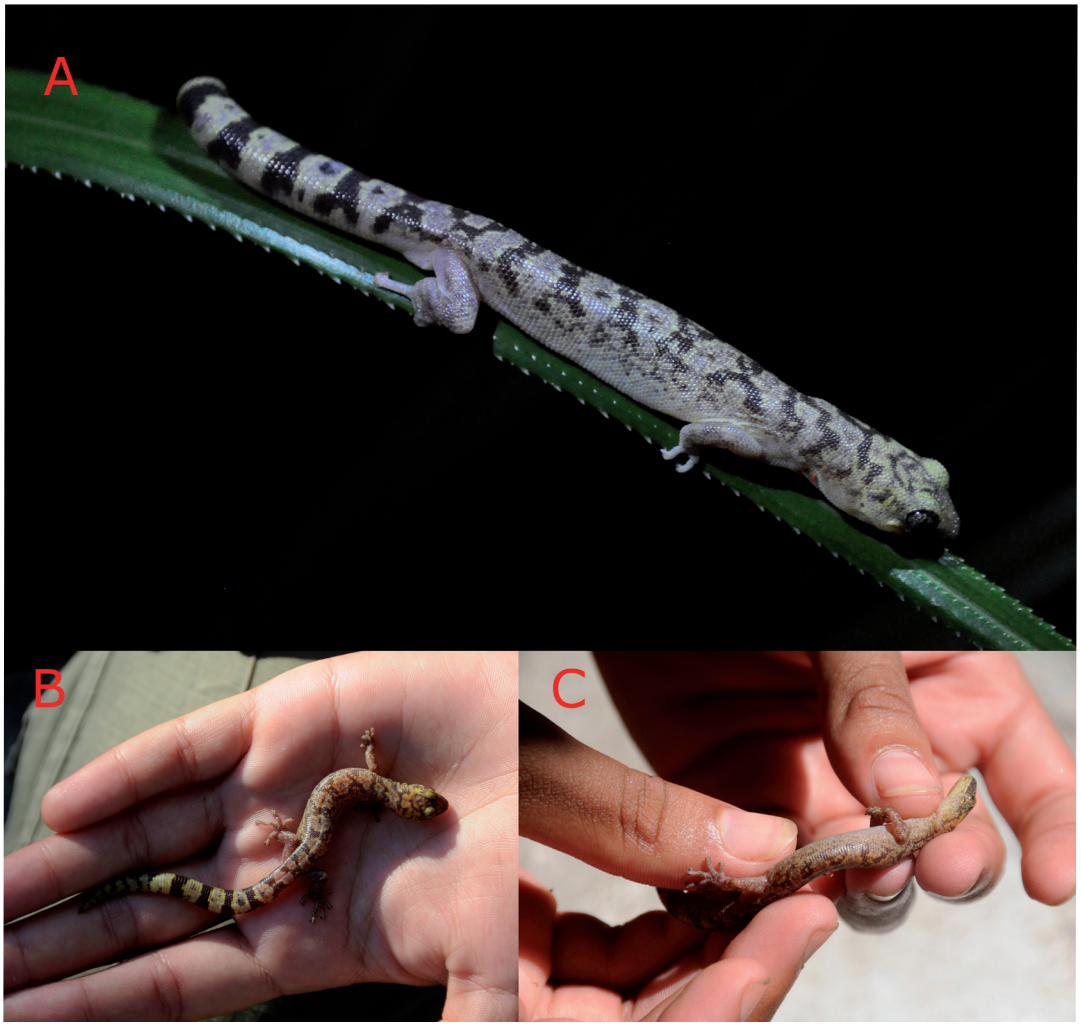

Figure 2. Photos of the individual found in Sainte Luce, southeast Madagascar (A) *Matoatoa spannringi* on its original perch (Photo by V. Wilson) (B) shows the dorsal colouration (C) shows a side view of the specimen (Photos B and C by M. Jacobs).

two postmental scales, and seven infralabials. Dorsal colouration was greyish with irregular black transverse bands surrounded by yellow, which extended down to the tip of the tail. The tail tip was encircled by scansorial scales which enable this species to utilise its tail in a prehensile manner. In members of the genus *Matoatoa*, the scansorial scales of the tail tip are not differentiated into a pad, and they are not limited to the ventral surface. At least in this regard, the scansorial tail tip of *Matoatoa* spp. is unique (Nussbaum, Raxworthy and Pronk, 1998). The individual had bright yellow lips. This yellow colouration extended slightly to the underside of the chin. Ventrally the individual was whitish-grey in colour. The ventral part of the tail tip was dark grey (Fig. 2).

Madagascar's biodiversity is both unusually distinctive and threatened and additional research on the fauna and flora is urgently needed. *Matoatoa spannringi* is thought to be one of the rarest reptiles in Madagascar, hence further study is needed to determine its population status (Nussbaum, Raxworthy and Pronk, 1998). Intensive herpetofaunal survey work in this region is needed to update the current distribution of many species in order to determine conservation priorities and management strategies (Raxworthy et al., 2003).

Acknowledgements. We would like to thank Gonçalo M. Rosa for his evaluation, Forrest Hogg and Jean Baptiste Ramanamanjato for their support and recommendations. We would also like to thank Valerie Wilson and Mark Jacobs for their help with photographs. In addition we would like to thank Solo, our local guide in Sainte Luce.

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Accepted by Wouter Beukema