

TÓN, Pamplona (Spain), on November 23, 1999, i.e. at the end of the rainy season, at Siminti at the southwestern edge of the National Park, in a pond close to the Siminti hotel. The double paravertebral black bands which are diagnostic for this species, are well visible (fig. 2).

Iosu ANTÓN sent the photograph to me in April 2000, together with photos of additional herpetological species from the Niokolo Koba Park (all from Siminti). These were *Amnirana galamensis* (DUMÉRIL & BIBRON, 1841), *Hyperolius* sp., *Agama agama* (LINNAEUS, 1758), *Tarentola parvicarinata* JOGER, 1980, and a juvenile *Trachylepis perroteti* (DUMÉRIL & BIBRON, 1839). All pictures are kept in the photo archives of the Herpetology Section of ZFMK (Zoologisches Forschungsinstitut und Museum A. Koenig, Bonn).

REFERENCES: ANDERSSON, L. G. (1937): Reptiles and batrachians, collected in the Gambia by GUSTAV SVENSSON and BIRGER RUDEBECK.- Ark. Zool., Stockholm; 29A (16): 1-28. JOGER, U. & LAMBERT, M. R. K. (1996): Analysis of the herpetofauna of the Republic of Mali, I. Annotated inventory, with description of a new *Uromastix*.- J. African Zool. (Rev. Zool. Africaine), Tervuren; 110 (1): 21-51. JOGER, U. & LAMBERT, M. R. K. (2002): Inventory of amphibians and reptiles in SE Senegal, including the Niokolo Koba National Park, with observations on factors influencing diversity.- Trop. Zool., Firenze; 15: 165-185. RÖDEL, M.-O. (2000): Herpetofauna of West Africa. Vol. I: Amphibians of the West African savanna. Frankfurt am Main (Ed. Cimaira), 332 pp. SCHIÖTZ, A. (1999): Treefrogs of Africa. Frankfurt am Main (Ed. Chimaira), 350 pp. WANGER, T. C. (2005): The amphibians of the Kiang West National Park, The Gambia.- Salamandra, Rheinbach; 41 (1/2): 27-33.

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KEY WORDS: Amphibia: Anura: Hyperoliidae: Kassiniinae: *Kassina kassinoides*, first record, Senegal

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## On the occurrence of *Ptychadena schillukorum* (WERNER, 1907) in Egypt

Although Egypt is a largely hyperarid country it is home to a reasonable diversity of amphibians, due in part to the presence of the Nile River, which acts as a corridor for several taxa of Afrotropical origin to extend as far north as the Mediterranean. ANDERSON (1898), FLOWER (1933), MARX (1968), HAFEZ (1978), SALEH (1997) listed up to seven species of Anura occurring in Egypt: *Bufo kassasii* BAHA EL DIN, 1993, *B. regularis* REUSS, 1833, *B. viridis* LAURENTI, 1768, *B. dodsoni* BOULENGER, 1895, *Rana bedriagae* CAMERANO, 1882, *Ptychadena mascareniensis* s. l. (DUMÉRIL & BIBRON, 1841) and *Hyla savignyi* AUDOUIN, 1827. BAHA EL DIN (2001) reported the occurrence of *R. sahariana* BOULENGER, 1913 in the Western Desert of Egypt. *Bufo pentoni* ANDERSON, 1893, *Rana cordofana* (STEINDACHNER, 1867) and *B. xeros* TANDY, TANDY, KEITH & DUFF-MACKAY, 1976 are also listed for Egypt by ANDERSON (1898) and FROST et al. (1998-2004). The listing of the first two can be explained by the fact that Egypt's past geographic boundaries encompassed large portions of today's Sudan. However, the inclusion of *B. xeros* has no explanation hitherto. A further species, *Ptychadena schillukorum* (WERNER, 1907), was listed intermittently as occurring in Egypt [mostly using its junior synonym *P. floweri* (BOULENGER, 1917)] in several regional and global accounts of amphibian fauna, such as POYNTON (1964), RÖDEL (2000) and FROST et al. (1998-2004), amongst others. However, this listing was regarded as unjustified due to the lack of any recent evidence (BAHA EL DIN 2001).

The listing of *P. schillukorum* for Egypt was based solely on reports by LOVE-RIDGE (1933, 1957), who made cursory reference to three *Ptychadena* specimens housed in the Museum of Comparative Zoology, Cambridge, MA (MCZ 3138-40) collected from Giza, which he referred to this species. No further observations or material referable to the species was documented from Egypt before or since LOVE-RIDGE's (l. c.) reports, despite the extensive collections and prospection made in the country over the



Fig. 1: Female *Ptychadena schillukorum* (WERNER, 1907) (SMB 10897), collected near Fariskur, Nile Delta, Egypt. (Photo: S. BAHA EL DIN).



Fig. 2: Female *Ptychadena mascareniensis* s. l. (DUMÉRIE & BIBRON, 1841) (SMB 10898), collected from the exact locality as (SMB 10897). (Photo: S. BAHA EL DIN).

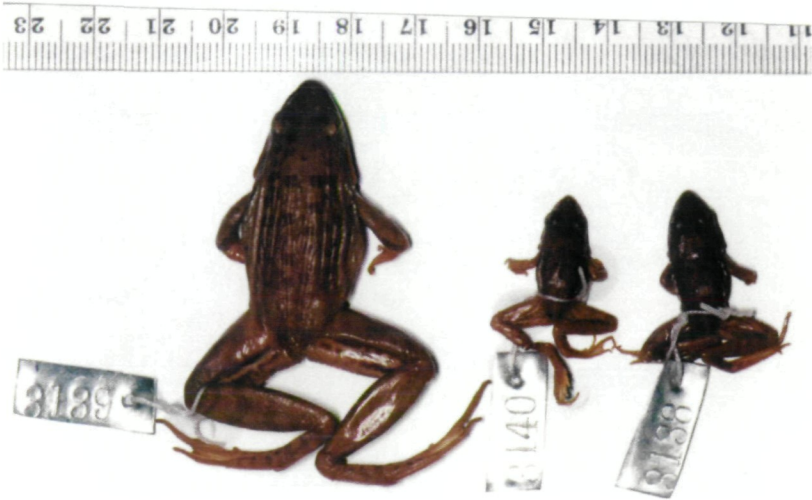


Fig. 3: Three specimens of the genus *Ptychadena* collected from Giza, Egypt (MCZ 3138-40) identified as *P. schillukorum* by LOVERIDGE (1933, 1965), re-identified herein as *P. mascareniensis*. (Photo: S. BAHA EL DIN).

years. As a consequence the species was not considered as part of Egypt's fauna by local workers, and did not appear in any of the subsequent herpetofaunal accounts for the country (FLOWER 1933; MARX 1968; HAFEZ 1978; SALEH 1997; BAHA EL DIN 2001).

On 7 September 2002, during fieldwork in the northeast portion of the Nile Delta the author discovered and collected a single frog, which is clearly referable to *P. schillukorum* (in the author's private collection SMB 10897, fig. 1). The specimen was found on the western margins of Lake Manzala at 31°24'N 31°46'E near the town of Fariskur.

Description of SMB 10897 (from live specimen, fig. 1): A female medium-sized ranid frog, snout-vent length 40.7 mm. Head as long as wide (measured at tympanum), snout rather short, nostrils placed close to its tip; tympanum diameter 64% of that of the eye. A glandular fold extends from below the eye to above arm. Skin on back and sides of body rather granular; longitudinal dorsal and lateral ridges broken up into elongate disjunct warts. Hind limbs relatively short and robust, foot (excluding tarsus) shorter than tibia. Outer metatarsal tubercle absent, inner metatarsal tubercle pronounced, rounded; subarticular tubercles present; distal two phalanges of fourth toe

free of webbing. Dorsum light olive grey with round dark brown spots on back (coinciding mostly with the interrupted dorsal ridges), being smaller in number and size and lighter in colour in the sacral area. Dorsolateral ridges slightly whitish. Upper lip and glandular fold extending to above arm whitish, contrasting with darker canthal area. Hind limbs with dark bars; posterior surface of thigh mottled with dark grey spots (without dark and light bands as in *Ptychadena mascareniensis*); forearms feebly mottled. Throat and upper chest mottled with dark grey spots, venter uniform whitish. Palmar and plantar surface dark, webbing slightly pigmented dark.

The specimen matches key distinctive characters of *P. schillukorum* described by WERNER (1907): Head as long as wide; tympanum not more than two thirds of eye diameter; interorbital distance equal to upper eyelids; pronounced glandular fold extending from below the eye to above arm; vomerine teeth in two oblique widely separated groups; dorsal ridges segmented and not obvious; toes rather blunt with pronounced subarticular tubercles; outer metatarsal tubercle inconspicuous or absent; webbing formula similar. Coloration very similar, most notably WERNER's description of "marbled" posterior surface of thigh. These characters



also fit clearly the wider concept of the species, which is currently acknowledged to encompass in its synonymy *P. floweri* and *Abrana cotti* (PARKER, 1931) (e.g. POYNTON & BROADLY 1985; CHANNING 1993, 2001; FROST et al. 1998-2004). However, *P. schillukorum* might prove to be a complex of species rather than a single taxonomic unit, as has been shown in the case of some species that occupy very large geographic regions with wide ecological amplitude (e.g. *P. mascareniensis* – VENCES et al. 2004).

The specimen was found at midday in a ditch amongst flooded rice fields, while in the process of devouring a young *P. mascareniensis* (SMB 10899), about a third of its own size. This corresponds with the observation of INGER & MARX (1961) that the species' diet mainly comprised large active terrestrial animals. Other amphibians found in the same locality besides *P. mascareniensis* (fig. 2), which was very abundant, were *Bufo kassasii* and *B. regularis*.

Most surprisingly, on examining LOVERIDGE's (1933) three original specimens collected from Giza, Egypt (MCZ 3138-40, see fig. 3) they proved to be in fact referable to *P. mascareniensis* rather than *P. schillukorum* (comp. figs. 1, 2 and 3)! It is almost bizarre that LOVERIDGE (l. c.) would have erroneously identified these specimens, and inadvertently referred them to a species that actually occurs in the country! Thus, the account herein represents the first genuine report of *P. schillukorum* from Egypt. After examining a considerable series of *Ptychadena* from Egypt in the field and in the Chicago Field Museum, American Museum of Natural History (AMNH) and the MCZ, the author found only one further specimen of *P. schillukorum* collected from Fayoum in 1905 (AMNH 37182). This excludes the possibility that the species could have been recently introduced.

The (re)discovery of *P. schillukorum* in Egypt is significant in that it shows that there are still considerable gaps in our knowledge, even in such regions which are densely populated by humans and seemingly well-studied, such as the Nile Delta. There are still no clear indications as to the abundance and status of *P. schillukorum* in Egypt. However, given the fact that the species has remained undocumented for

such a long time, it is likely to be a localised and rare inhabitant of wetlands of Lower Egypt.

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**REFERENCES:** ANDERSON, J. (1898): Zoology of Egypt. Vol. I. Reptiles and Batrachia. London (Bernard Quartich), 371 pp. BAHA EL DIN, S. M. (2001): The herpetofauna of Egypt: species, communities and assemblages. Unpublished PhD thesis, University of Nottingham, pp. 435. CHANNING, A. (1993): A new grass frog from Namibia. - South African J. Zool., Pretoria; 28: 142-5. CHANNING, A. (2001): Amphibians of Central and Southern Africa. Ithaca, NY, London (Cornell University Press), pp 470. FLOWER, S. S. (1933): Notes on the recent reptiles and amphibians of Egypt, with a list of the species recorded from that kingdom. - Proc. Zool. Soc., London; 1933: 735-851. FROST, D. R. & The American Museum of Natural History (1998-2004): Amphibian species of the world: an online reference. Version 3.0 (22 August 2004). Electronic Database < <http://research.amnh.org/herpetology/amphibia/index.html> >. HAFEZ, H. (1978): List of reptiles and amphibians of Egypt. Endangered species conservation project. Giza (Giza Zoological Garden), pp. 15. INGER R. & MARX, H. (1961): The food of amphibians. In: Mission G. F. DE WITTE: Exploration du Parc National de l'Upemba, Institute des Parcs Nationaux du Congo et du Ruanda-Urundi, Fasc. 64: 1-86. LOVERIDGE, A. (1933): Reports on the scientific results of an expedition to the southwestern highlands of Tanganyika Territory. - Bull. Mus. Comp. Zool., Harvard; 79: 1-19. LOVERIDGE, A. (1957): Checklist of the reptiles and amphibians of East Africa (Uganda; Kenya; Tanganyika; Zanzibar). - Bull. Mus. Comp. Zool., Harvard; 117 (2): 151-362. MARX, H. (1968): Checklist of the reptiles and amphibians of Egypt. Special Publication, United States Naval Medical Research Unit Number 3, Cairo, Egypt, ARE, pp. 91. POYNTON, J. C. (1964): The amphibians of southern Africa: a faunal study. - Ann. Natal Mus., Pietermaritzburg; 17: 1-334. POYNTON, J. C. & BROADLY, D. G. (1985): Amphibia Zambesiaca 2. Ranidae. - Ann. Natal Mus., Pietermaritzburg; 27: 115-181. RÖDEL, M. O. (2000): Herpetofauna of West Africa vol. I. Amphibians of the West African savanna. Frankfurt (Edition Chimaira), pp. 332. SALEH, M. A. (1997): Amphibians and reptiles of Egypt. Kairo (Publication of the National Biodiversity Unit No. 6., Nature Conservation Sector, Egyptian Environmental Affairs Agency), pp. 236. VENCES, M. & KOSUCH J. & RÖDEL, M. O. & LÖTTERS, S. & CHANNING, A. & GLAW, F. & BÖHME, W. (2004): Phylogeography of *Ptychadena mascareniensis* suggests transoceanic dispersal in a widespread African-Malagasy frog lineage. - J. Biogeogr., Oxford; 31: 593-601.

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