

First record of *Nycteris macrotis* in Mauritania (Chiroptera: Nycteridae)

První náález rýhonosa velkouchého (*Nycteris macrotis*) v Mauretánii
(Chiroptera: Nycteridae)

Petr BENDA^{1,2}, Antonín REITER³ & Marcel UHRIN⁴

¹ Department of Zoology, National Museum (Natural History), Václavské nám. 68, CZ–115 79 Praha 1, Czech Republic; petr_benda@nm.cz

² Department of Zoology, Charles University in Prague, Viničná 7, CZ–128 44 Praha 2, Czech Republic

³ South Moravian Museum in Znojmo, Přemyslovců 8, CZ–669 45 Znojmo, Czech Republic

⁴ Department of Zoology, Institute of Biology and Ecology, P. J. Šafárik University, Moyzesova 11, SK–040 01 Košice, Slovakia

received on 19 September 2011

Abstract. An adult male of *Nycteris macrotis* was netted at Kaédi, southern Mauritania (16° 09' N, 13° 31' W), on 13 October 2010. It represents the first record of this species in Mauritania.

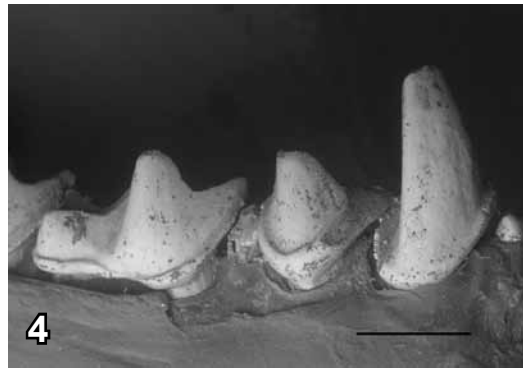
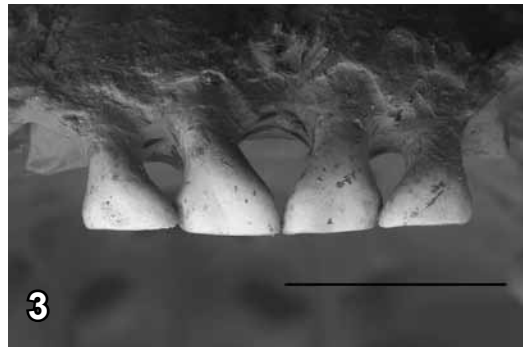
Key words. *Nycteris*, distribution, West Africa.

Mauritania is a large country in West Africa, covering more than a million square kilometres of the Saharan and Sahelian arid vegetation zones. Bat fauna of the country is relatively poorly known; in their preliminary checklist of Mauritanian mammals, PADIAL & IBÁÑEZ (2005) reported only 13 species of bats belonging to seven families. Altogether, only some 50–60 bat records are available from the country so far (cf. POULET 1970, QUMSIYEH & SCHLITTER 1981, PADIAL & IBÁÑEZ 2005, ALLEGRIINI et al. 2011, LELANT & CHENAVAL 2011, own unpubl. data).

The large-eared slit-faced bat, *Nycteris macrotis* Dobson, 1876, is a rather common species in sub-Saharan Africa, mainly in the forest and woodland habitats; it occurs in West Africa from Senegal to Nigeria and Cameroon, in Central and East Africa from Congo to North Sudan and Somalia, and from Angola to Botswana and Mozambique (HAYMAN & HILL 1971, VAN CAKENBERGHE & DE VREE 1985, MONADJEM et al. 2010). It was reported as the most frequently recorded bat of five species of the family Nycteridae in Senegal (ADAM & HUBER 1976), the country neighbouring Mauritania from the south. However, only one species of this family has been known to occur in Mauritania, *Nycteris hispida* (Schreber, 1774) (QUMSIYEH & SCHLITTER 1981, PADIAL & IBÁÑEZ 2005, cf. LELANT & CHENAVAL 2011).

During a short trip to western Mauritania in 2010, we found one individual of *Nycteris macrotis*, undoubtedly representing a new species for the bat fauna of the country.

An adult *Nycteris* male was netted above a temporary water pool at the W edge of Kaédi (16° 09' N, 13° 31' W, 20 m a. s. l.; Fig. 1) on 13 October 2010. During the same netting session, 1 ♂ of *Nycticeinops*



schlieffenii (Peters, 1859) and 2 ♂♂, 4 ♀♀ of *Scotophilus* spp. were also captured. The *Nycteris* individual was deposited in the National Museum, Prague, Czech Republic (NMP 93607, alcoholic specimen with skull extracted). External dimensions of the respective specimen are as follows: forearm length 48.1 mm; head and body length 68 mm; tail length 56 mm; ear length 32.7 mm; tragus length 7.6 mm; weight 14.7 g. Cranial dimensions are as follows (in millimetres): greatest length of skull 20.97; occipitocanine length 21.08; condylocanine length 18.72; zygomatic width 12.76; width of interorbital constriction 6.18; postorbital width 3.98; neurocranium width 8.77; mastoidal width 9.01; neurocranium height 8.26; rostral width across canines (incl.) 5.88; rostral width across third molars (incl.) 8.75; length of the upper tooth-row (C–M³) 7.62; condylar length of mandible 14.35; length of the lower tooth-row (C–M₃) 8.24. The values of the dimensions well correspond to those given by ADAM & HUBER (1976) and KOCH-WESER (1984) for *Nycteris macrotis* from Senegal and Burkina Faso, respectively. Besides the body and skull size and ear length typical for *N. macrotis*, the specimen also possesses typical characters of the species as reviewed by ROSEVEAR (1965), HAYMAN & HILL (1971), VAN CAKENBERGHE & DE VREE (1985), and THOMAS et al. (1994), i.e. the semi-lunate shape of tragus (Fig. 2), absolutely and relatively small size of the second lower premolar (Fig. 4), and bifid upper incisors (Fig. 3).

The record of *Nycteris macrotis* in Mauritania is not surprising – it is the only common species of the genus *Nycteris* in the northern part of Senegal (ADAM & HUBER 1976), the closest Senegalese locality (Anndiaré) lies only some 100 km SSE of Kaédi, and also other record sites (Maka Diama, Rosso, Tatki, Fete Ole) are situated close to the Senegal River, i.e. to the Mauritanian state border. The locality in Mauritania represents one of the northernmost sites situated in the whole distribution range of *N. macrotis*; the only more northward record – besides the latter four mentioned from Senegal and situated roughly at the same latitude – comes from Shendi (16° 41' N) in North Sudan (DE WINTON 1901).

Our finding increases the number of bat species in the fauna of Mauritania to 14. Nevertheless, such a number could hardly be considered final. Mauritania is situated in the arid belt of the northern part of Africa, covered by relatively poor habitats with rather low biodiversity. However, HUTSON et al. (2001) reviewed notably higher numbers of bat species in other Sahelian countries; viz. 18 in Mali, 21 in Niger, and 21 in Chad. A similar number of bat species could also be expected to occur in Mauritania. ADAM & HUBER (1976) reported a record of *Nycteris thebaica* (Geoffroy, 1818) from Rosso and BÖHME & HUTTERER (1978) of *Chaerephon pumilus* (Cretzschmar, 1830) from Richard Toll, both situated in northern Senegal directly on the Senegal River and Mauritanian border. Moreover, unpublished records of at least three other bat species are available from various sites in Senegal, located very close to this river (2–10 km away): *Taphozous mauritanus* Geoffroy, 1818, *Glauconycteris variegata* (Tomes, 1861), and *Scotophilus nigrata* (Schreber, 1774) (BENDA, ČERVENÝ, KONEČNÝ & KOUBEK, unpubl. data). At least these five species are thus very real candidates to enrich the faunal list of Mauritania.

SOUHRN

Na západním okraji města Kaédi v jižní Mauretánii (16° 09' N, 13° 31' W) byl 13. října 2010 odchycen do sítě dospělý samec rýhonosa velkouchého (*Nycteris macrotis*) (obr. 1–4). Jedná se o první dokumentovaný nález tohoto druhu v Mauretánii, který je 14. druhem netopýra fauny této země.



Fig. 1. A temporary pool in a courtyard at the western edge of Kaédi, netting site of *Nycteris macrotis* in Mauritania. Figs. 2–4. Morphological characters of *Nycteris macrotis* from Mauritania (NMP 93607). 2 – portrait showing the tragus shape. 3 – upper incisors. 4 – lower unicuspidal teeth. Scale bars = 1 mm; both colour photos by Antonín REITER.

Obr. 1. Dvůr s dočasnou kalužínou na západním okraji města Kaédi, místo odchytu rýhonosa velkouchého (*Nycteris macrotis*) v Mauretánii. Obr. 2–4. Morfologické znaky rýhonosa velkouchého (*Nycteris macrotis*) z Mauretanie (NMP 93607). 2 – portrét ukazující tvar kozlíku (tragu). 3 – horní řezáky. 4 – spodní jednohraté zuby. Měřítka = 1 mm; obě barevné foto Antonín REITER.

ACKNOWLEDGEMENTS

The faunal study in Mauritania was carried out with a support from the Czech Science Foundation (# 206/09/0888) and the Ministry of Culture of the Czech Republic (# MK00002327201).

REFERENCES

- ADAM F. & HUBER B., 1976: Les Nycteridae (Chiroptera) du Sénégal: distribution, biométrie et dimorphisme sexuel. *Mammalia*, **40**: 597–613.
- ALLEGRI B., DURAND G., DURAND E. & PEYRE O., 2011: On some bats recorded in the Adrar region, Mauritania. *African Bat Conservation News*, **26**: 2–4.
- BÖHME W. & HUTTERER R., 1978: Kommentierte Liste einer Säugetier-Aufsammlung aus dem Senegal. *Bonner Zoologische Beiträge*, **29**: 303–322.
- DE WINTON W. E., 1901: List of mammals, collected by the Hon. N. C. Rothschild and Mr. A. F. R. Wollaston, principally near Shendi, on the Upper Nile, in 1901. *Novitates Zoologicae*, **8**: 397–401.
- HAYMAN R. W. & HILL J. E., 1971: Part 2. Order Chiroptera. Pp.: 1–73. In: MEESTER J. & SETZER H. W. (eds.): *The Mammals of Africa: an Identification Manual*. Smithsonian Institution Press, Washington.
- HUTSON A. M., MICKLEBURGH S. P. & RACEY P. A., 2001: *Microchiropteran Bats. Global Status Survey and Conservation Action Plan*. IUCN, Gland & Cambridge, x+256 pp.
- KOCH-WESER S., 1984: Fledermäuse aus Obervolta, W-Afrika. *Senckenbergiana Biologica*, **64**: 255–311.
- LELANT V. & CHENAVAL N., 2011: *Bilan succinct des espèces de chauves-souris inventoriées en Mauritanie lors de la mission de décembre 2010/janvier 2011*. Unpublished report, 5 pp. DOI: <http://storage.canalblog.com/66/65/738905/63677801.pdf>
- MONADJEM A., TAYLOR P. J., COTTERILL F. P. D. (W.) & SCHOEMAN M. C., 2010: *Bats of Southern and Central Africa. A Biogeographic and Taxonomic Synthesis*. Wits University Press, Johannesburg, xii+596 pp.
- ROSEVEAR D. R., 1965: *The Bats of West Africa*. Trustees of the British Museum (Natural History), London, xvii+418 pp. + map.
- PADIAL J. M. & IBÁÑEZ C., 2005: New records and comments for the Mauritanian mammal fauna. *Mammalia*, **69**: 239–243.
- POULET A. R., 1970: Les Rhinopomatidae de Mauritanie. *Mammalia*, **34**: 237–243.
- QUMSIYEH M. B. & SCHLITTER D. A., 1981: Bat records from Mauritania, Africa (Mammalia, Chiroptera). *Annals of Carnegie Museum*, **50**: 345–351.
- THOMAS N. M., HARRISON D. L. & BATES P. J. J., 1994: A study of the baculum in the genus *Nycteris* (Mammalia, Chiroptera, Nycteridae) with consideration of its taxonomic importance. *Bonner Zoologische Beiträge*, **45**: 17–31.
- VAN CAKENBERGHE V. & DE VREE F., 1985: Systematics of African *Nycteris* (Mammalia: Chiroptera). Pp.: 53–90. In: SCHUCHMANN K. L. (ed.): *Proceedings of the International Symposium on African Vertebrates: Systematics, Phylogeny and Evolutionary Ecology*. Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, 585 pp.