

Lemniscomys bellieri,
a new species of Muridae from the Ivory Coast
(*Mammalia, Muridae*)

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During the overall revision of the species group *Lemniscomys striatus*, I started some years ago and that is actually nearly completed, I came across a large series of « spotted grass mice » of the Ivory Coast, which clearly belong to an undescribed species. I am very pleased to name this new species in honour of my friend Dr. L. Bellier, whose fieldwork has contributed so much to our knowledge of West African Mammals. This note has to be considered as a short preliminary description and the complete discussion of the exact systematic status of this new species will follow in a later publication.

***Lemniscomys bellieri* n. sp.**

Holotype: adult ♂, skin and skull, original number 1446, from Lamto (Ayérou) Ivory Coast, obtained 13 june 1964, by L. Bellier. Type specimen in the collections of the Koninklijk Museum voor Midden Afrika (Tervuren).

Paratypes: 10 ex.

- 1275, adult ♂, skin and skull, Lamto, 16.3.1972, obtained by W. Verheyen, used for chromosome study.
11511, adult ♀, skin and skull, Lamto, 25.8.1967, L. Bellier.
1768, adult ♂, skin and skull, Lamto, 12.5.1965, L. Bellier.
11582, adult ♀, skin and skull, Lamto, 24.9.1967, L. Bellier.

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- 1428, adult ♂, skin and skull, Lamto, 12.6.1964, L. Bellier.
1875, adult ♂, skin and skull, Lamto, 6.7.1965, L. Bellier.
11983, adult ♂, skin and skull, Lamto, 27.6.1968, L. Bellier.
1874, adult ♀, skin and skull, Lamto, 6.7.1965, L. Bellier.
1769, adult ♀, skin and skull, Lamto, 12.5.1965, L. Bellier.
1279, adult ♀, skin and skull, Lamto, 16.3.1972, W. Verheyen, used
for chromosome study.

Five paratypes will be in deposit at the Tervuren Museum; five at the Muséum National d'Histoire Naturelle (Paris).

Distribution: The guinea and doka woodland of Ivory Coast.

Specimens were captured at:

Bouaké	7°42'N - 5°00'W	Lamto	6°12'N - 4°58'W
Fetekro	7°49'N - 4°41'W	Sananferedougou	10°03'N - 7°31'W
Kafiné	8°31'N - 5°18'W		

Description: *Lemniscomys bellieri* is allied to *L. macculus macculus*. The skull is smaller than in typical *striatus*, with a small M¹ and relatively large auditory bullae which are 16,6 - 20 % of the greatest skull-length. In M₁ the Sm is usually absent (Misonne, 1969). The slight sexual dimorphism in skull measurements can only be demonstrated with canonical analysis.

The footlength is short. Tail nearly always a little longer than the head and body.

The dorsal pattern resembles that of *Lemniscomys striatus venustus*: the black mid-dorsal stripe is well defined; on both sides there are eight pale-spotted longitudinal rows; only the design of the third, fourth and fifth white stripe is clear; the individual spots are not sharply differentiated from their background. In some extreme cases the dorsal region has a close resemblance to that of *Lemniscomys linulus*.

The hairs of the ventral side are pure white, rarely washed with buff.

Measurements: The measurements (in mm) of the holotype are followed by means, minimum and maximum of all the adult specimens (n = 251): head and body 105 (109; 91 - 127); length of tail 106; (112; 94 - 134); length of hind foot + nail 24,0 (25,4; 23,0 - 27,0); length of ear 15,0 (15,9; 13,0 - 19,0); greatest length of skull 27,5 (28,18; 24,35 - 31,30); prosthion-condylion 24,9 (25,42; 22,35 - 27,75); henselion-basion 21,15 (21,42; 18,75 - 23,70); henselion-palation 11,45 (11,55; 10,20 - 12,85); length of palatal foramina 4,90 (5,51; 4,80 - 6,30); length of diastema

6,60 (6,69; 5,65 - 7,75); distance between the anterior border of the alveole of M¹ and the edge of upper incisor 7,10 (7,18; 5,75 - 8,20); interorbital breadth 4,25 (4,41; 3,85 - 5,05); zygomatic breadth 12,40 (12,79; 11,20 - 14,40); palate breadth between M¹ 2,25 (2,21; 1,70 - 2,70); length of upper cheekteeth 4,90 (5,10; 4,60 - 5,65); breadth of the upper dental arch 5,60 (5,80; 5,15 - 6,50); breadth of M¹ 1,55 (1,61; 1,45 - 1,75); breadth of zygomatic plate 3,20 (3,34; 2,65 - 4,10); greatest breadth of nasals 3,05 (3,15; 2,70 - 3,65); greatest length of nasals 10,40 (10,61; 8,55 - 12,20); length of lower cheekteeth 4,65 (4,88; 4,45 - 5,45); length of auditory bulla 4,85 (5,07; 4,50 - 5,70); braincase breadth 11,40 (11,69; 10,50 - 12,90); depth of incisors 1,25 (1,31; 1,10 - 1,55).

Chromosomes : 2N = 56. The karyotype consists of seventeen pairs of telocentrics, seven pairs of submetacentrics, three pairs of metacentrics and one pair of sex chromosomes XX' or XY. The X chromosomes are the largest metacentrics, the X' chromosomes are large submetacentrics, the Y chromosome is metacentric or submetacentric.

Discriminant function : The function for discrimination of *Lemniscomys striatus striatus* and *L. bellieri* from Ivory Coast is :

$$K = 2,41644 A + 7,51728 B + 16,28408 C + 2,55296 D - 16,52514 E$$

In which A = length of hind foot + nail, B = interorbital breadth, C = breadth of M¹, D = greatest length of nasals and E = length of auditory bulla. If $K < 71,3$ the specimen is a *Lemniscomys bellieri* and if $K > 71,3$ it is a *L. striatus striatus*. The probability of misclassification is 3,5 %.

LITERATURE

- MISONNE, X., 1969. — African and Indo-Australian Muridae. Evolutionary trends. — *Ann. Mus. R. Afr. Cent., Sér. in-8°, Sci. Zool.*, n° 172, 219 pp.