

Description of *Malacomys verschureni*, a new Murid-species from Central Africa (*Mammalia - Muridae*)

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Several years ago the senior author received for determination from his colleague Dr J. Verschuren a rather important collection of Rodents from the former Parc National Albert (Eastern Zaïre).

Amidst other interesting items he found an alcoholic specimen, clearly belonging to the genus *Malacomys* but in many respects so different from the actually recognized species *edwardsi* and *longipes* that he concluded he was dealing with a representative of an unknown species. Disposing of only one specimen he decided however to await further evidence before describing it.

In the beginning of this year he was confronted again with this problem when Dr J. Verschuren suggested to Dr E. Van der Straeten and himself to make a joint publication concerning the Rodents of the Parc National of the Virunga. Since a thorough study of the aberrant *Malacomys* led Dr Van der Straeten to the same conclusions and since it is now very unlikely that additional specimens will be available in the near future, we decided finally to describe it anyhow.

We are very pleased to name this new species after our colleague Dr J. Verschuren who has dedicated so much of his efforts to the study and protection of the mammalian fauna of Central Africa.

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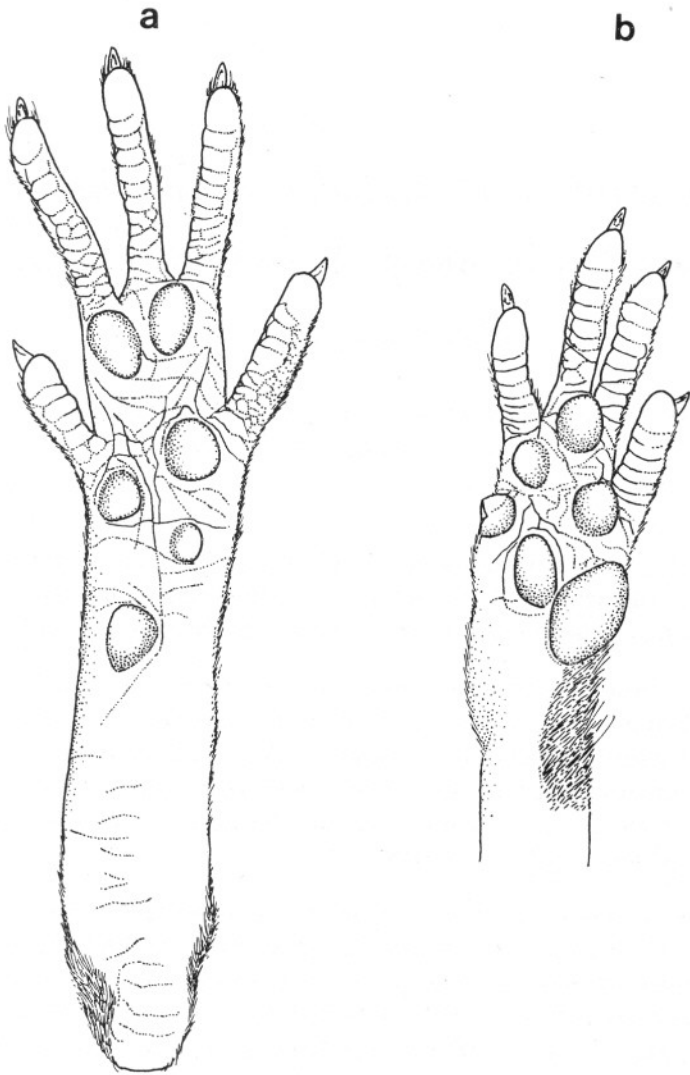


Fig. 1. — The left foot (a) and the left hand (b) of *Malacomys verschureni* spec. nov.

Malacomys verschureni spec. nov.

Type: adult ♀, alcohol specimen, skull, original number 1262/4 from Mamiki (République du Zaïre), obtained 10 april 1959, by Dr J. Verschuren.

Type specimen in the collections of the Koninklijke Museum voor Midden-Afrika (Tervuren-Belgium).

Geographical coordinates of Mamiki: (N.N.E. of Beni) approx. 0°40'N, 29°35'E.

The specimen was captured close to water in short vegetation and not far from a primary forest with *Cynometra*.

External characters:

The pelage of the back and head is light brown, the flanks being slightly lighter coloured than the middorsal region. All dorsal hairs are fine, soft, and have a maximum length of 13 mm; no underfur is present. Only the distal third of each hair is brown, the rest is dark grey, except for the hair basis which is whitish.

There is a rather clear cut colour-difference between the dorsal and the ventral side. The hair in the midventral region attains a maximum length of about 5 mm; the top half of each hair is whitish, the rest has a brown-grey coloration.

The hairs of the mouth and nose region are somewhat lighter than those of the upperside of the head; the underside of the head shows the same colour as the belly; long vibrissae (3,7 cm).

The tail is longer than head + body-length; its dorsal side is grey-brown whereas ventrally it is whitish, the transition-line between both sides being irregular. In our only specimen the whitish ventral side of the tail is freckled with grey-brown patches and the tip of the tail is whitish. The general aspect of the tail is naked because only a few, short whitish hairs (0,45-0,50 mm) are implanted between the scales; the scaling is short (each scale is 0,5 mm long).

The ears are relatively big and rounded. At their base the colour is whitish whereas for the remainder they have approximately the same coloration as the dorsal side of the tail. They are sparsely and inconspicuously haired.

The dorsal side of the hindfoot is whitish and completely covered with whitish hairs, its ventral side being completely hairless, darker and showing 6 tubercles; all fingers have claws (see fig. 1a).

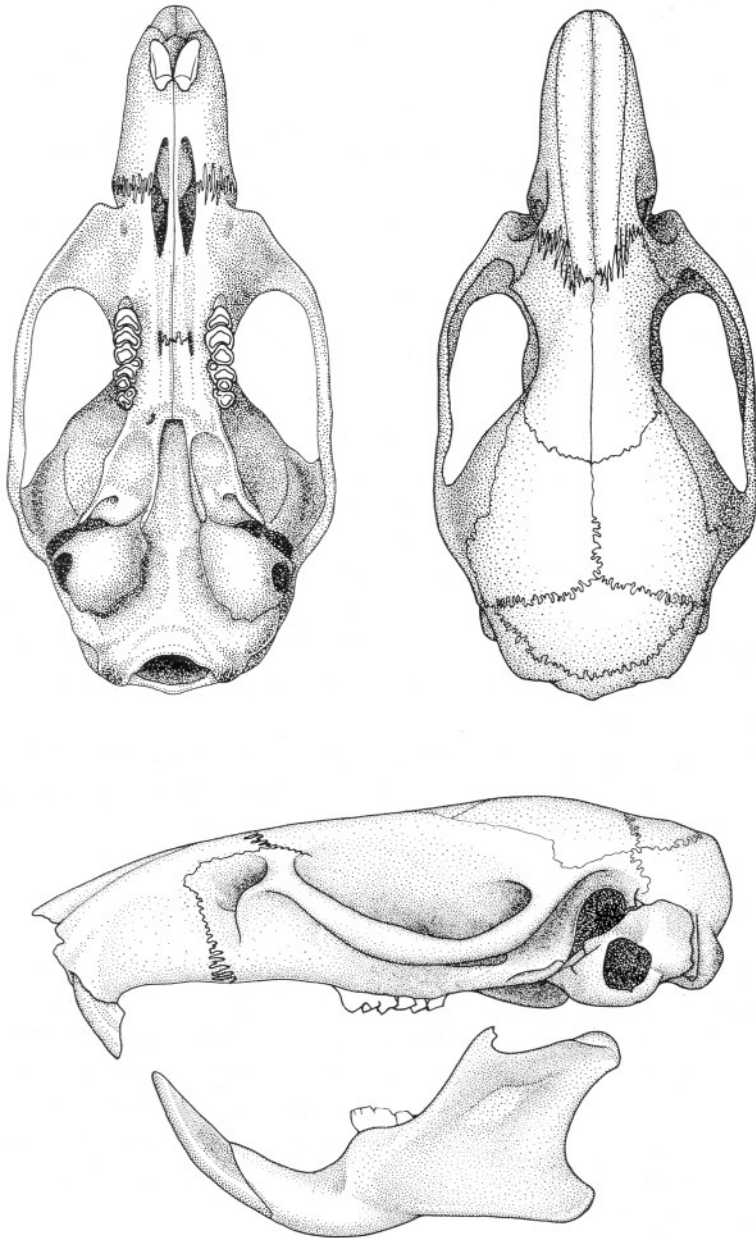


Fig. 2. — Skull of *Malacomys verschureni* spec. nov.

The upper- and underside of the hand is whitish; the dorsal side also being covered with whitish hair. The third finger is clearly the longest, the thumb being rudimentary. The thumb carries a flat nail, the other fingers have claws. Five tubercles cover the ventral side of the forefoot (see fig. 1b).

Mammary formula: (1-2) 2 all well developed in our specimen.

Cranial characters:

Craniologically our new species resembles undoubtedly more closely to *M. longipes* than to *M. edwardsi*. This is especially the case for the following craniological characters: the general aspect of the interorbital region, the temporal ridges, the rostrum and the ear-region in lateral view, the light frontal indentation, the curvature of the parietalia, the strongly developed zygomatic arch, the general aspect of the mandibula (see fig. 2).

On the other hand our new species has certain craniological features for which it is different from *longipes* and *edwardsi*. We mention the flat profile of the nasalia, the pointed posterior ends of the palatal foramina, the very strongly developed exterior processus on the mandibula, etc. We hesitate however to attach much importance to these characters since we do not have any idea concerning the variability.

Dental characters:

Although our only specimen has medium weared down teeth it is still possible to give some information concerning its dentition.

In the first place we note that the upper incisors are opisthodont and rather heavily built. Further we find a very small T_3 on M^2 and a T_9 on M^1 and M^2 ; both cusps occur but very seldom in *Malacomys*-dentitions so that we have to conclude that in this respect our new species is more primitive than *longipes* and *edwardsi*. However it is possible that when more material becomes available, these features will appear to be exceptional (see fig. 3).

Finally we could not find morphological differences with *edwardsi* or *longipes* when examining the dentition of the lower jaw.

Measurements of the type-specimen (in mm):

Head and bodylength ± 120 ; length of tail 132; length of hindfoot (+ u) 29.0; length of ear 20.0. All external measures are taken on the alcoholic specimen.

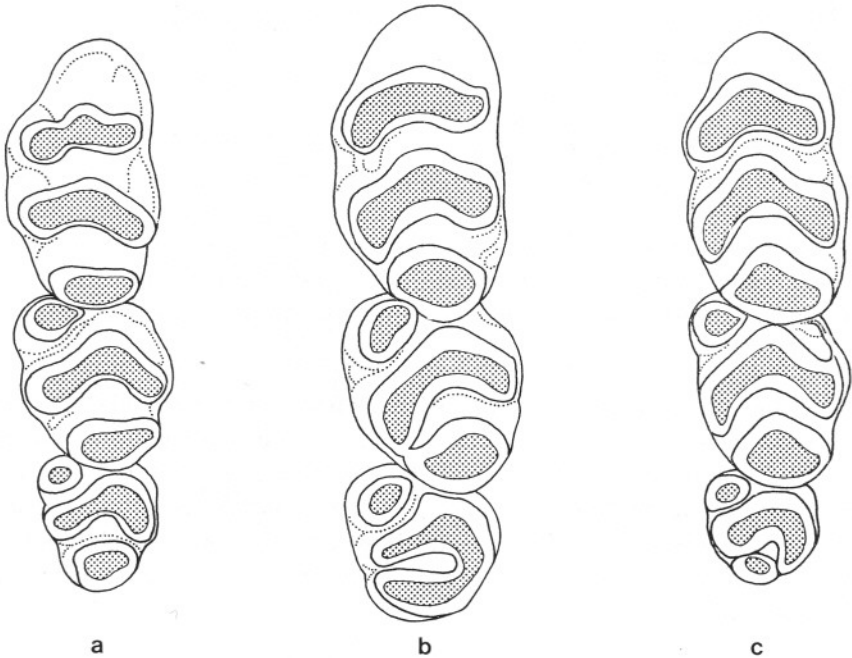


Fig. 3. — Left upper tooththrow of (a) *Malacomys edwardsi* (collection Bellier nr 33123) (b) *Malacomys longipes centralis* R.G.M.A.C. 29587 (c) *Malacomys verschureni* spec. nov.

Greatest length of skull 33,95; prosthion-condylion 31,60; henselion-basion 27,40; henselion-palation 16,00; length of palatal foramina 6,20; length of diastema 10,50; distance between the anterior border of the alveole M¹ and the edge of the upper incisor 11,10; interorbital breadth 5,05; zygomatic breadth 15,45; palate breadth between M¹ 3,10; length of upper cheekteeth 5,45; breadth of upper dental arch 5,90; breadth of M¹ 1,45; breadth of zygomatic plate 4,30; greatest breadth of nasals 3,70; greatest length of nasals 14,00; length of lower cheekteeth 5,00; length of auditory bulla 4,75; braincase breadth 12,70; depth of incisors 1,90.

TABLE. — Measurements of *Malacomys* in mm; mean, range and number of specimens are given here. The hindfootlength of *Malacomys edwardsi* and *M. verschureni* was taken with nail.

Measurements	<i>Malacomys</i>		
	<i>longipes centralis</i>	<i>edwardsi</i>	<i>verschureni</i>
head and body length	159 (127 ? - 190) n = 42	137 (107 - 157) n = 33	± 120
length of tail	174 (140 ? - 195) n = 44	157 (121 - 182) n = 32	132
length of hindfoot	38,0 (35,0 - 41,0) n = 47	34,5 (31,0 - 37,0) n = 33	29,0
length of ear	26,2 (22,0 - 29,0) n = 46	25,6 (22,0 - 28,0) n = 31	20,0
greatest length of skull	40,8 (34,9 ? - 44,6) n = 56	36,5 (31,4 - 39,4) n = 33	33,95

Discussion :

The newly described species belongs to the genus *Malacomys*. There can be no doubt about this when one considers the combination of certain morphological characteristics of the skull such as the general aspect of the rostrum, the very short palatinal foramina, the small bullae, the short molar series.... Also the morphology of the molars give clear indications in the same direction.

M. verschureni resembles externally and craniologically more to *M. longipes* than to *M. edwardsi*. It can however easily be distinguished from both species by its smaller external measures (see table) and also by the fact that its feet have 6 instead of 5 plantar tubercles (see fig. 1a).

Craniometrical comparison shows that *verschureni* is clearly smaller in many respects than both other species.

Certain features of the molars (such as the presence of a T_3 in M^2) and the fact that the feet have 6 plantar tubercles suggest that *M. verschureni* is the more primitive of the *Malacomys*-species.

Finally it has to be stressed that we fully realize that certain morphological details in our description are probably overestimated due to the fact that we had only one specimen at our disposal.