

## NOTE XV.

ON A NEW VERY SMALL SHREW FROM MAYOTTE,  
CROCIDURA (PACHYURA) COQUERELII, POLLEN  
AND VAN DAM, MS.

BY

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The *Insectivora* from Madagascar generally belong to forms which are quite distinct from each other, such as the genera *Centetes*, *Oryzoryctes*, *Geogale*, etc., and which have now become the types of separate families and sub-families. Up to 1848 the large group of Shrews, *Soricidae*, was looked upon as not inhabiting either Madagascar or the little adjoining islands. At that time Mr. Ch. Coquerel, Surgeon in the French Navy, published a good description and figures of *Sorex madagascariensis* <sup>1)</sup>, a very small Shrew, which he had discovered at Nossi-Bé, on the N. W. Coast of Madagascar. Later in 1855 Dr. Leop. Fitzinger briefly described as *Pachyura auriculata* <sup>2)</sup>, a much larger Shrew brought home by Mad. Ida Pfeiffer from her travels in Madagascar. But this species does not differ in any essential character from *P. serpentaria* Is. Geoffr.,

1) Ann. des Sc. Nat. Zoologie, 3e Série, 1X, 1848, p. 193. pl. 2.

2) S. B. der Math. Naturw. Class. der Kais. Akad. der Wiss. Wien, Bd. XXXI, 1855, p. 342; and Bd. LVII, 1868, p. 145 (separata, sub tit; Kritische Unters. über Spitzmäuse, etc. 1e Abth. p. 25.

a Shrew not uncommon in India and Ceylon, which also inhabits Mauritius (Ile de France) where it was imported by vessels. It has most probably been brought to Madagascar in the same way. As to *Sorex madagascariensis* Coquerel, a species very distinct from all others, already known, the case is quite different. This species together with *Sorex etruscus* Savi, from South-Europe and North-Africa, with *S. gracilis* de Blainv., from South-Africa, and with the species about to be described, constitutes a small group of diminutive forms in the subgenus *Pachyura*. This group is apparently limited to the Occidental part of the Ethiopian region and includes the smallest Mammals hitherto known.

CROCIDURA (PACHYURA) COQUERELII n. sp.

Color of the fur quite uniform: above and beneath light rufous brown, each hair being sandy-grey near its base and tipped with shining red, by no means paler inferiorly.

The size and proportions of the body, the shape of head and tail agree with those of *C. (P.) etrusca*; only the color and the teeth are different.

Measures of the only specimen preserved in alcohol.

	m. m.
Total length . . . . .	67
Head and body . . . . .	40
Tail . . . . .	27
Tip of snout to eye . . . . .	5
Eye to ear . . . . .	3
Breadth of ear . . . . .	4
Vertical opening of earconch . . . . .	5
Height of earconch backwards . . . . .	2
Longest whiskers . . . . .	13
Hind foot . . . . .	7
Skull (appoximatively) . . . . .	12
Head with its skin . . . . .	14

Head large; nose terminated by a little blackish bare

muzzle; whiskers pale sandy; large rounded ears with internal valves well developed, blackish and sparingly clothed with short rufous hairs, longer on the edges of the earconchs and of the valves. Feet hairy down to the yellowish claws, which are even surpassed by the hairs; sole of the hind foot bare up to the heel and blackish. Tail tetragonal, strong, not swollen at the base, but gradually tapering towards its extremity, covered with close rufous hairs above and below, with a few longer hairs on the level of each vertebra.

Dentition: 30 white teeth of which 4 little upper intermediate ones (unicuspids of Mr. Elliot Coues), viz: 2 lateral incisors, 1 canine and 1 premolar on each side (S. G. *Pachyura* de Selys).

$$\text{Dental formula of E. Brandt: I. } \frac{2+4}{2}, \text{ C. } \frac{2}{2}, \text{ M. } \frac{2+8}{2+6} \\ = \frac{18}{12} = 30 \text{ teeth.}$$

*Upper jaw* (covered by its mucous membrane). — First large incisor long and crooked, its fore point rises considerably above the level of the posterior cusp, which is sharp and forms an acute angle with the second lateral incisor (1<sup>st</sup> intermediate of authors). The latter tooth is large, its point reaches as low as the fore point of the first incisor; third incisor and canine (2<sup>d</sup> and 3<sup>d</sup> intermediates of authors) both small and alike, hardly exceeding the gum; canine separated from the first molar by an intermediate space. The rudimentary premolar (4<sup>th</sup> intermediate of authors) not contiguous with the canine, but situated internally to the tooth-row, very small and hardly visible even with a lens. It is situated backwards and inwards of the first large molar, in the hollow between the anterior process and the chief cusp of this tooth, distant from the canine as far as the antero-posterior diameter of this tooth and wholly invisible externally. The first molar very large, lengthened, its fore cusp nearly flat, hardly raised above the gum, its median

cutting-cusp almost solely constituting the external surface of the tooth, directed backwards, and the posterior point forming only the extremity of the hind edge of the chief cusp. When looked upon from above this tooth is triangular, with a long process directed forwards. The second molar is provided with a very large internal median prism reaching as low as the chief point of the first molar.

*Lower jaw.* — The two large incisors are raised at their extremity and divergent, leaving between their tips a distance equal to their own diameter.

*Habitat:* Mayotte, N. W. Coast of Madagascar, where it was collected by Pollen and v. Dam, now deposited in the Leyden Museum and labelled by them »*Sorex coquerelii*, n. sp.?"

I owe the communication of this interesting Shrew to the courtesy of Dr. F. A. Jentink, who has kindly authorised me to describe it. *Crocidura (P.) coquerelii* is remarkable among all the other Shrews for the uniformity of the color of its fur, which is truly and absolutely »*unicolor*'' and »*concolor*,'' certainly an exceptional case among Mammals and especially *Soricidae*. It is impossible to confound this new species with any species hitherto described.

*Crocidura (P.) gracilis* de Blainv. of South-Africa differs from it in having the tail stouter at the root and down to the first third of its length; by the smaller ear-valves and by the reddish-brown chestnut color of the fur being paler on the inferior parts.

*Crocidura (P.) madagascariensis* Coquerel differs by its slender body, smaller head, thinner tail and grey-brownish color, paler beneath. Finally *Crocidura (P.) etrusca* Savi, although closely allied to it differs by its color being grey washed with reddish above, lighter on the sides, becoming whitish on the cheeks, belly, underparts of tail and feet.

*Crocidura (P.) coquerelii*, besides, differs from the three preceding species by its small rudimentary premolar (4<sup>th</sup> upper intermediate), which is separated from the canine

by an interspace and implanted much more backwards and inwards than in any known species of the subgenus *Pachyura*. The first large molar has a triangular base longer than wide, whilst in the other species this tooth is nearly as large as long (as in *P. etrusca*), or even exhibits an almost square cingulum (in *P. madagascariensis*). This disposition of the teeth agrees with what is found, although on a larger scale, in the largest Shrew of India, *Crocidura (P.) coerulescens* Shaw = *Cr. (P.) indica* E. Geoffr., but is even proportionally exaggerated in our small species; whilst in all the very small *Pachyura* of India, the rudimentary premolar, contiguous with the canine, although not infrequently internal to the tooth-row, is always partially or wholly visible exteriorly. And so the large *Pachyura coerulescens* of India seems more closely allied to the very small *Pachyura* of the African and Malagasy Fauna than to the small species of the Indian or Oriental region.

Again it is worthy of notice, that not one species of a size so very small is recorded as inhabiting East Africa, amongst the numerous Shrews hitherto known from Mozambique, Zanzibar and Mombaça, most of which were described by Professor W. Peters. <sup>1)</sup>

Villevêque, 16 March 1880.

1) It may here be mentioned that this naturalist has described, in the year 1869, — see Baron C. C. von der Decken's *Reisen in Ost-Africa*, Bd. III, Abth. I, p. 10 — a shrew of a much larger size, belonging to another subgenus: *Crocidura albicauda* Peters; which was brought home from the Island of Angasilia (Comores). And so (this Shrew included) there are known three *Soricidae* which are peculiar to Madagascar; and it seems that they are confined to the small archipelagoes (Nossi-Bé, Mayotte, Comores) situated N. E. of the large island. This region of the Madagascar Fauna approaches more closely to the Fauna of the African continent than any other. (E. L. Trouessart.)