

TWO NEW *LEGGADA* MICE FROM SIAM.

BY C. BODEN KLOSS, F. Z. S.

These mice are part of a collection of mammals from Western Siam made by Mr. K. G. Gairdner, about which I have written in previous volumes of this Journal.

Some years ago Mr. G. S. Miller united the genus *Leggada* of Gray with *Mus*¹, and Mr. Oldfield Thomas acquiesced in this opinion. When I first examined Mr. Gairdner's mice it seemed to me that they represented a new genus, for I was unable to find one in which they could be placed: but at about the same time Mr. Thomas, in England, came to the conclusion that *Leggada* was worthy of recognition and decided to revive it². Mr. Thomas, who has since then seen these specimens, writes me that they belong to *Leggada* as he now conceives it, and has kindly sent me an example of *Leggada pahari* from Sikkim³ to which some of the specimens are closely related.

These animals are like *Mus* with notched incisors, m^1 longer than m^2 and m^3 combined and with no frontal ridges; but without any masseteric knob at the anterior roots of the anteorbital plates and the palatal foramina not narrowing to acute terminations between the molars. The external appearance is apparently similar but the pelage is spiny.

The following Key indicates the differences, as far as Indochinese species are concerned, between some genera of mice which have the bevelled edges of the upper incisors notched.

- A. Palatal foramina penetrating deeply between the molars.
- a. Frontal ridges well marked: no masseteric knobs. *Leggadilla*.
- b. No frontal ridges.
- a1 Masseteric knobs present: molar laminae
much distorted. *Mus*.
- b1 Masseteric knobs absent: molar laminae
less distorted. *Tautatus*.
- B. Palatal foramina not penetrating deeply between the
molars: no frontal ridges nor masseteric knobs. *Leggada*.

1. Miller, Mammals of Western Europe, 1912, p. 863.

2. Thomas, Journ. Bombay Nat. Hist. Soc., xxvi, 1919, pp. 417-420.

3. *Mus pahari*, Thomas, op. cit. xxiv, 1916, p. 415.

Leggada pahari gairdneri subsp. nov.

Diagnosis. A little more buffy above than *L. p. pahari* (Thomas) and whiter below; the tail also paler below, nearly bi-coloured. Skull very similar but the palatal foramina more contracted posteriorly, ending less squarely; the rostrum weaker, not so deep; the incisors less stout and markedly less curved backwards.

Characters and colour. Pelage composed of flattened grooved spines and fine hair, grey ("dark gull grey") at the base; the spines about 8 mm. long on the back, with blackish tips, and the soft hair with buffy tips; the general colour-effect on upper parts and hind limbs being a dark brown (nearly "clove" brown) slightly grizzled with buff; sides of body greyer; sides of head and neck and the fore-limbs whitish; under side of hind-limbs, head and body white, the latter distinctly margined from the sides and clothed with a mixture of hair and fine spines about 5 mm. long, grey at base with white tips. Hands and feet white. Tail dark above and clad with dark hairs, pale below and clad with pale hairs.

Skull and teeth. Skull of medium proportions, braincase rounded. Nasals rounded anteriorly and posteriorly and terminating about level with the premaxillaries and with the anterior edge of the orbital spaces.

Supraorbital edges abruptly rounded off, but without ridge or bead. Anteorbital plate sloping considerably backwards from base to zygoma and scarcely convex.

Dorsal profile of rostrum straight between tips of nasals and mid-frontals: top of braincase flattened when viewed from behind.

Palatal foramina short and broad, their greatest combined breadth in front of their mid-length, rounded posteriorly and falling short of the molars by at least 1 millimetre.

Front wall of first molar nearly vertical: tooth-rows converging posteriorly.

Mesopterygoid space broad and parallel-sided, scarcely reaching the level of the last molars.

Bullae of normal size and dilation, as in *Mus*.

Measurements. See table postea.

Type. Adult female (skin and skull) No. 2621/CBK. Collected at Me Taw, 1500 ft., Western Siam, 40 miles N. W. of Raheng, on 4th February 1917 by Mr. K. G. Gairdner. Orig. No. 357.

A second female (2620/CBK) was obtained at the same place on 5th March 1907. Orig. No. 385. It is slightly more buffy above than the type.

I shall not attempt to describe here the molars of these two specimens: they are not ivory-like, clearly grooved and channelled as in *Rattus*, *Mus*, etc., but are covered with a sort of translucent enamel which prevents details being clearly seen.

I am rather doubtful whether a third female with the same history (No. 2619/CBK: Orig. No. 372) is of this form, but until the mice of Siam are better known I leave it here.

It is rather darker and duller above than the others, being less grizzled with buff (perhaps owing to wear), while the base of the pelage is neutral grey: the hair of the under-parts is a little less spiny and is shorter so that the grey base is slightly more visible.

The skull is of the same general shape, but the nasals are sharply pointed posteriorly and extend beyond the premaxillaries which are not carried obliquely backwards with them.

The anteorbital plates are convex, practically perpendicular above the base.

The palatal foramina are narrowed anteriorly, have their greatest combined breadth behind their mid-length and terminate in line with the alveolar edge of the first molars.

Toothrows scarcely converging; the molars are much worn; but the incisors curve to the same slight degree as the other two: mesopterygoid space narrower.

Leggada rahengis nov.

Characters and colour. Upper pelage spiny, the spines about 7 mm. long with broad black tips mixed with fine hairs tipped with ochraceous, so that the general colour is a dark grizzle of och-

raceous-buff and blackish: sides of head and body rather more ochraceous buffy. Pelage throughout neutral grey at base. Sides of muzzle, limbs beneath and under-parts greyish-white, fairly clearly margined. Hands and feet white. Tail dark above and pale below, the hairs clothing it in agreement.

There appear to be three pairs of pectoral mammae: the inguinal number is not ascertainable.

Skull and teeth. Skull long and narrow: braincase markedly pear-shaped.

Nasals extending slightly beyond the premaxillaries and the anterior edge of the orbital spaces, rounded anteriorly, truncate posteriorly.

Supraorbital edges sharply angular but without ridge or bead. Anteorbital plates very angular, the apex slightly overhanging the base and the backward flexure very abrupt: a very small excrescence at the anterior foot, in no way approaching in size or shape the masseteric knob of *Mus*.

Dorsal profile of skull regularly curved, crown but little flattened. Palatal foramina long and almost parallel-sided, but their greatest combined breadth in front of their mid-length, truncate posteriorly and terminating in line with the anterior edges of the crowns of the first molars, considerably within the roots, which are exposed: toothrows converging posteriorly.

Mesopterygoid space narrow and diverging slightly posteriorly, scarcely reaching the level of the last molars.

Size and dilation of bullae normal, as in *Mus*.

Upper incisors nearly upright, as in *L. p. gairdneri*.

Measurements. See table postea.

Type. Adult female with very worn teeth (skin and skull) 2618/CBK. Collected at Me Taw, 1500 ft., 40 miles N.W. of Raheng, Western Siam on 7th. February 1917 by Mr. K. G. Gairdner. Orig. No. 362.

A single specimen only.

Remarks. This mouse is probably a race of *Leggada nitidula* (Blyth),¹ with which species it seems to agree in colour and in the possession of upper incisors about upright, or only very slightly recurved, and somewhat similar supraorbital ridges:² but it has the tail as much longer than that of *L. n. popæa*³ as the tail of that form is longer than that of *L. n. nitidula*. It is also otherwise larger than either.

Measurements of Mice in millimetres.

	<i>Leggada pahari gairdneri</i>			<i>L. rahengis</i> Type 2618/CBK.
	Type. 2621/CBK.	2620/CBK.	2619/CBK.	
Sex	♀	♀	♀	♀
Head and body	93.5	91	—	88.5
Tail	—	88	—	86
Hindfoot, s. u.	21	20	—	17
Ear	15	14.5	—	15
Skull:—				
greatest length	25.5*	24.5*	24.0	26.0
condylo basilar length	23.0	21.2	—	23.7
palatilar length	11.2	10.4	10.1	12.1
diastema	7.5	7.2	6.2	7.5
upper molar row (alveoli)	3.9	3.7	4.0	5.0
do do (crowns)	3.7	3.5	4.0	4.0
length of palatal foramina	4.5	4.0	4.8	5.5
combined nasals	9.8 x 2.6	9.5* x 2.7	9.4 x 2.6	10.0 x 2.8
zygomatic breadth	12.2	11.6	12.0	12.2

1. *Mus nitidulus* Blyth, Journ. Asiat. Soc. Bengal, xxviii, 1859, p. 294 (Shwegyin, N. Tenasserim).

2. *Vide* Thomas, op. cit. xxvi, pp. 418, 420.

3. Thomas, op. cit., p. 420.

* Approximate.

