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### XXX.—Two new Indo- Malayan rats

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less strongly marked. It also has the frontal outline convex and the interorbital space slightly convex and not flattened. It is impossible, therefore, to identify the specimen above described with *B. medius*, although, like that species, it has the muzzle smaller and lighter than in *B. gabbi*. Since Thomas says nothing about the bullæ and the downward extension of the pterygoid, I presume that in those respects *B. medius* is like *B. gabbi*.

Since writing the foregoing description of *B. beddardi* and determining its distinctness from extant descriptions and published figures, I have compared the skull with the skulls of the genus *Bassaricyon* in the British Museum, which, as identified by Oldfield Thomas, belong to the species *alleni*, *gabbi*, and *medius*. This comparison completely confirms my previously formed opinion as to the validity of the species. Although I have laid undue stress upon the downward extension of the pterygoid, I have no doubt whatever that the specimen above described represents a hitherto unrecognized form characterized mainly by the combination of the following characters:—(1) The flat interorbital region followed by the high rounded forehead; (2) the great width of the palate and mesopterygoid fossa; (3) the anterior inflation of the bulla.

I may add that in the original figure of the type of *B. alleni* the posterior inflation of the bulla, seen from the side, is not adequately represented, and that in an example of *B. gabbi* from Chiriqui the styloid portion of the bulla is much more deeply excavated than in *B. beddardi*. This point is not clearly indicated in Allen's photogravure of the skull (*loc. cit.* p. 665, fig. 10).

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XXX.—*Two new Indo-Malayan Rats.*

By HERBERT C. ROBINSON, C.M.Z.S.

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EXAMINATION of the type and other specimens in the British Museum attributed to *Rattus rajah* (Thos.) shows that two forms are represented—viz., the true *R. rajah* from various parts of Sarawak, and another from Kina Balu, in British North Borneo, apparently unnamed, which I propose to call

*Rattus bandahara*, sp. n.

*Type.* Adult ♀ (skin and skull). Collected on Kina Balu, British North Borneo, in October 1892, by A. H. Everett. B.M. no. 93. 4. 1. 12.

The representative in the highlands of North Borneo of the Malayan *Rattus surifer* (Miller), but rather larger and with more cinnamon-buff on the thighs; a strongly marked zinc-orange gorget.

Differs from *Rattus rajah* in having the white of the belly quite cut off from the feet by the rich colour of the thighs and by having the base of the fur clear grey, not brown. Pelage generally more woolly and the spines fewer and more flexible.

*Skull* much as in *R. surifer*, the nasals not prolonged backwards beyond the fronto-maxillary suture as in *R. rajah* and *R. pellow* (Miller).

*Dimensions of type*:—Hind foot (measured wet) 41·5 mm.

*Skull*: condylo-basilar length 37·8; diastema 12·3; upper molar series (alveolar) 6·3; palatal foramina 6·8 × 4·0; least interorbital breadth 7·1; zygomatic breadth 20·0; median length of nasals 16·0; breadth of nasals anteriorly 4·8 mm.

*Specimens examined*.—Three; the type, another adult, and a more immature specimen, all from Kina Balu.

*Remarks*.—All the large Malaysian land areas (Malay Peninsula, Sumatra, Borneo, and to a less extent Java) possess each their representative form of the numerous indige-nous rats which occur throughout the region. It has hitherto been assumed that *R. pellow* was unrepresented in Borneo, while *R. rajah* was the representative of the mainland *R. surifer*. *R. rajah* is, however, the form allied to *R. pellow*, while the above-described race is that representative of *R. surifer*.

*Rattus panglima*, sp. n.

*Type.* Adult ♂ (skin and skull). Collected on Palawan by A. H. Everett. B.M. no. 94. 2. 1. 11.

The local representative of *R. surifer* (Miller), from which it differs in the extremely dull colour above, free from any tinge of zinc-orange, inclining to lavender on the sides. A narrow line of white joins the underparts to the feet. Under-fur apparently grey, but pelage much degraded.

*Skull* as in *R. surifer*, but the nasals very broad anteriorly and rapidly contracting.

*Dimensions of type*:—Hind foot (measured wet) 39·3 mm.

*Skull*: condylo-basilar length 39·3; diastema 12·9; upper molar series (alveolar) 6·9; palatal foramina 6·3 × 3·3; palatilar length 19·5; least interorbital breadth 7·2; zygomatic breadth (app.) 20·8; median length of nasals 18·8; breadth of nasals anteriorly 5·0 mm.

*Specimens examined*.—One, the type.

XXXI.—*Two new British Entomostraca: Alona protzi, Hartwig, and a new Species of Mesochra in Norfolk.* By ROBERT GURNEY, M.A.

*Alona protzi*, Hartwig.

*Alona protzi*, Hartwig, Sitzber. Ges. Naturf. Freunde, 1900, p. 228; Keilhack, Arch. f. Hydrob. u. Hydrog. vi. 1911, p. 467.

A number of specimens of this *Alona* were obtained on September 12, 1920, by washing masses of *Cordylophora* detached from the woodwork of Ludham Bridge, on the River Ant, in Norfolk. A strong current runs through this narrow bridge, and the water, in normal circumstances, is quite fresh, but the species of Entomostraca found in the collection included *Nannopus palustris*, *Tachidius littoralis*, and *Mesochra rapiens*—all species characteristic of more or less brackish water. *Cordylophora* grows in luxuriance on this woodwork, and I have on several occasions investigated the Entomostraca living in its shelter without previously meeting with *A. protzi*, neither have I found it in any other locality. Nine days later only a very few individuals were to be found, and on November 17 the species had entirely disappeared. It would hardly be supposed that *Cordylophora* would provide a suitable habitat for Entomostraca; but six species of Cladocera and ten of Copepoda were found in collections made on Sept. 12 and 21.

*Alona protzi* resembles *A. guttata*, Sars, but is readily distinguished by the presence of three denticles on the posterior ventral angle of the shell and by the structure of the postabdomen. The latter has a marked backward prolongation, but the apex is rounded and not angular as in *A. guttata*. The dorsal margin is armed with a double row of eight to ten small spines, and there are a number of lateral groups of very delicate hairs which do not quite reach the margin of the postabdomen. The basal spine of the terminal claw is very long, exceeding half the length of the claw, and