

PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF SIX NEW MAMMALS FROM THE  
MALAY ARCHIPELAGO.

BY GERRIT S. MILLER, JR.

[By permission of the Secretary of the Smithsonian Institution.]

The large collection of Malayan mammals in the United States National Museum includes representatives of the following six forms, none of which appears to have been previously described.

**Pipistrellus curtatus** sp. nov.

*Type*.—Adult female (in alcohol) No. 141,019, U. S. National Museum. Collected on Engano Island, Sumatra, December 1, 1904, by Dr. W. L. Abbott. Original number, 3785.

*Diagnosis*.—Resembling the Javan *Pipistrellus imbricatus*, but ear larger, muzzle shorter and crown area of anterior lower premolar much reduced.

*External characters*.—Size and general form essentially as in *P. imbricatus*, but tail slightly longer and foot less robust. Membranes with no special peculiarities, the wing inserted at base of outer toe. Calcar terminating indistinctly, its posterior border with a slight keel that shows no tendency to develop into a distinct lobe like that of *P. imbricatus*. Ear extending a little beyond nostril when laid forward, its general outline as in *P. imbricatus* but antitragus better developed. Head shorter and broader than in the Javan species, its general outline when viewed from above nearly circular, with slightly projecting, moderately tumid muzzle. Color after six years immersion in alcohol apparently not so dark as in *P. imbricatus*.

*Skull and teeth*.—The skull is at once distinguishable from that of *Pipistrellus imbricatus* by the decided reduction of rostrum as compared with braincase, a difference equally appreciable in dorsal or palatal view. Palate so much shortened that length in median line is only about equal to width between last molars. Audital bullae as in *P. imbricatus*. Basisphenoid pits rather well defined.

Teeth as in *Pipistrellus imbricatus* except that premolars are decidedly more reduced; anterior upper premolar with crown area barely equal to half that of outer incisor; crown area of anterior lower premolar slightly

more than half that of succeeding tooth; length of crowns of the two lower premolars together decidedly less than that of first molar.

*Measurements.*—Type: head and body, 40; tail, 34; tibia, 14.8; foot, 7.2; forearm, 33.6; thumb, 6.2; third finger, 60; fifth finger, 45; ear from meatus, 13.6. Skull of type: condylobasal length, 11.6; zygomatic breadth, 9.0; interorbital constriction, 3.8; breadth of braincase, 7.0; depth of braincase, 5.0; mandible, 8.6; maxillary tooththrow exclusive of incisors, 4.2; mandibular tooththrow exclusive of incisors, 4.4.

*Specimens examined.*—Two, both from Engano.

#### ***Epimys maerens* sp. nov.**

*Type.*—Adult female (teeth so much worn that enamel pattern is beginning to be obscured) No. 141,193, U. S. National Museum. Collected at mouth of Mojeia River, Nias Island, Sumatra, March 11, 1905, by Dr. W. L. Abbott. Original number, 4062.

*Diagnosis.*—A member of the *Epimys rattus* group; color as in the dark *E. simalurensis* of Simalur Island, Sumatra, but size decidedly less, the hind foot not attaining a length of 40 mm., the maximum condylobasal length of skull among twelve adults, 42 mm.

*Measurements.*—Type: head and body, 178; tail, 168; hind foot, 34; (32). Average and extremes of the six largest specimens: head and body, 178 (170–185); tail, 159 (155–168); hind foot, 34.9 (33.6–36); hind foot, without claws, 33.1 (32–34). Skull of type and of largest specimen in the series: condylobasal length, 39.8 and 42.0; zygomatic breadth, 20.2 and 19.8; interorbital constriction, 6.8 and 6.6; breadth of braincase, 16.0 and 16.0; depth of braincase at middle, 11.8 and 12.0; nasal, 14.2 and 15.2; depth of rostrum behind incisors, 8.2 and 8.0; mandible, 25.0 and 26.0; maxillary tooththrow, 6.6 and 7.0; mandibular tooththrow, 6.2 and 7.0.

*Specimens examined.*—Nineteen, all from Nias Island.

*Remarks.*—The Nias representative of the *Epimys rattus* group shares the dark color of the other Barussan local forms. The upper parts have more of the buffy cast than is usual in *E. simalurensis* and the belly is a clearer smoky gray, but the difference is very slight. In size there is a marked contrast with *E. simalurensis* and *E. lugens*, in both of which the length of the hind foot usually exceeds 40 mm., and the condylobasal length is usually more than 45 mm. In both size and color the series is remarkably uniform. Two Nias specimens, however, represent a light colored species essentially like *Epimys neglectus* (Nos. 121,862 and 141,184); this animal has probably been artificially introduced.

#### ***Epimys barussanus* sp. nov.**

*Type.*—Adult male (teeth moderately worn), skin and skull No. 141,208, U. S. National Museum. Collected at mouth of Mojeia River, Nias Island, Sumatra, March 10, 1905, by Dr. W. L. Abbott. Original number, 4016.

*Diagnosis.*—A member of the *Epimys eximioriventer* group resembling the previously known species in general appearance, but size decidedly greater, and skull with anterior portion of rostrum widened.

*Color.*—The color does not differ essentially from that of *Epimys cremoriventer*, though the ochraceous of the back is duller (less yellow) and the intermingling of blackish hairs is somewhat more conspicuous. Tail more noticeably blackish than in *E. cremoriventer*, its annulations coarser and more evident.

*Skull and teeth.*—Aside from its conspicuously greater size the skull of *Epimys barussanus* differs from that of *E. cremoriventer* in a distinct broadening and deepening of anterior portion of rostrum at once appreciable on comparison of specimens. Contrast between width of nasals anteriorly and posteriorly more evident than in the smaller animal. Teeth with no peculiarities of form.

*Measurements.*—Type: head and body, 173; tail 194; hind foot, 34 (32). Skull of type: condylobasal length, 36.6 (33.2);\* zygomatic breadth, 18.2 (16.4); interorbital constriction, 6.6 (6.0); breadth of braincase, 15.4 (14.8); depth of braincase at middle, 11.0 (10.0); nasal, 14.2 (13.2); depth of rostrum behind incisors, 8.0 (6.8); mandible, 21.8 (20.0); maxillary tooththrow, 7.2 (6.0); mandibular tooththrow, 7.0 (6.0).

*Specimens examined.*—Four, all from the same locality as the type.

#### ***Epimys mengurus* sp. nov.**

*Type.*—Adult male (teeth moderately worn), skin and skull No. 125,021, U. S. National Museum. Collected at Bukit Menguru, Billiton Island, Sumatra, August 14, 1904, by Dr. W. L. Abbott. Original number, 3581.

*Diagnosis.*—Like *Epimys cremoriventer* but with relatively longer tail, smaller teeth and more slender skull; nasals showing a tendency to widen anteriorly as in *E. barussanus*.

*Measurements.*—Type: head and body, 134; tail, 182; hind foot, 26 (25). Skull of type: condylobasal length, 30.6; zygomatic breadth, 15.0; interorbital constriction, 5.6; breadth of braincase, 13.4; depth of braincase at middle, 9.8; nasal, 12.2; depth of rostrum behind incisors, 7.0; mandible, 17.2; maxillary tooththrow, 5.8; mandibular tooththrow, 5.6.

*Specimens examined.*—The type, from Billiton; also two immature individuals from Banka (Nos. 124,887 and 124,889) probably referable to the same form.

#### ***Epimys batus* sp. nov.**

*Type.*—Adult female (teeth moderately worn), skin and skull No. 121,792, U. S. National Museum. Collected on Pulo Pinie, Batu Islands, Sumatra, March 4, 1903, by Dr. W. L. Abbott. Original number, 2368.

*Diagnosis.*—A member of the *Epimys asper* group, with the large size and heavy teeth of *E. batamanus* Lyon, and *E. mandus* Lyon, but color very dark and rich, the upperparts essentially as in *E. mandus* but more strongly ochraceous, the underparts clear yellowish ochraceous-buff with only a slight trace of gray in region of chin.

*Measurements.*—Type: head and body, 133; tail, 107; hind foot, 32 (30.4). Two adult females: head and body, 135 and 146; tail, 105 and

\* Measurements in parenthesis are those of an old male *Epimys cremoriventer* with much worn teeth (No. 104,154, The Bindings).

105; hind foot, 30 (28.6) and 31 (29). Skull of type: condylobasal length, 31.4; zygomatic breadth, 16.0; interorbital constriction, 6.0; breadth of braincase, 14.2; depth of braincase at middle, 10.0; nasal, 11.2; depth of rostrum behind incisors, 6.6; mandible, 19.0; maxillary tooththrow, 5.8; mandibular tooththrow, 5.8.

*Specimens examined*.—Three, all from Pulo Pinie.

**Ratufa bicolor major** subsp. nov.

*Type*.—Adult female (skin and skull) No. 155,666, U. S. National Museum. Collected at Tjibodas, Mt. Gedé, Java, alt. 4,500 ft., August 15, 1909, by Wm. Palmer (Bryant Expedition). Original number, 505.

*Diagnosis*.—Similar to *Ratufa bicolor bicolor* of the lowlands of eastern Java but larger.

*Measurements*.—Type: head and body, 365; tail, 435; hind foot, 87 (80). Skull of type (teeth moderately worn): condylobasal length, 70.4 (66.0);\* zygomatic breadth, 45.8 (43.6); interorbital constriction, 28.2 (25.8); post-orbital constriction, 21.2 (21.8); mastoid breadth, 33.4 (32.0); nasal, 25.8 (22.0); greatest combined breadth of nasals, 13.4 (13.2); mandible, 47.0 (45.2); maxillary tooththrow (alveoli), 13.6 (13.8); mandibular tooththrow (alveoli), 14.0 (14.2).

*Specimens examined*.—Three, all from the same locality as the type.

---

\* Measurements in parenthesis are those of an old female (teeth much worn) from Tjimanggoe, Java, the largest in a series of twelve skulls of the lowland form.