## DASYMYS RUFULUS sp. nov.

Type.—Adult male (skin and skull) no. 83844, U. S. National Museum. Collected at Mount Coffee, Liberia, Africa, March 30,

1897.

Characters.—Plantar tubercles five as in D. incomptus and D. bentleyæ. Color much paler than in either of these, the dorsal area very slightly darker than sides and suffused with red. In size about equal to D. bentleyæ, but tail shorter, the proportions thus more nearly as in D. incomptus. Skull smaller than that of D. incomptus, the zygomatic width relatively less, the audital bullæ relatively smaller, and teeth, especially the incisors, less robust.

Fur.—The fur is fine but harsh, though without bristles. It consists of soft underfur and coarse somewhat iridescent hairs, the longer of which (about 20 mm. in length) are grooved, as may be seen on examination with a lens. Throughout the pelage the color zones on the individual hairs fade gradually into each other. On both back and belly the grooved hairs are light colored at base in contrast with the dark underfur through which they pass.

Color.—General color of dorsal surface wood-brown or clay color, finely though not conspicuously grizzled by darker and lighter hair tips, and dulled by appearance at surface of gray (Ridgway, Pl. II, No. 7) underfur. Throughout the dorsal area there is a distinct suffusion of red, somewhat variable according to light, but always noticeable on crown, shoulders, flanks, and about base of tail. The color of the back fades insensibly into dull grizzled ochraceous-buff on sides, and this into dull cream-buff on belly, where the dark bases of the hairs produce irregular and noticeable clouding. Muzzle and face hair-brown in rather marked contrast with crown and cheeks. Ears closely furred with short, dull brown hairs. Feet an indefinite hair brown. Tail dark brown above, faintly lighter below, but not bicolor.

Feet.—The feet are broad and strong, with toes of normal proportions. Soles with five tubercles, the hindermost of which is largest.

Tail.—The rather stout tail is distinctly and regularly annulated, the rings not obscured by hair. At middle there are ten rings to the centimeter. Each ring is divided into fairly well defined rectangular sections or scales slightly broader than long. In length the numerous fine hairs that spring from between the rings are about equal to width of two rings. At tip the rings become narrower and less definite and the hairs longer, but without forming a pencil.

Skull .- As compared with that of D. incomptus the skull of

Dasymys rufulus (fig. 40) differs chiefly in its smaller size, narrower rostrum, shorter broader interorbital region, narrower antorbital foramen, shorter nasals, and smaller audital bullæ. Antorbital foramen



Fig. 40. Dasymys rufulus. Type. Natural size.

narrower than in D. incomptus, the distance from its upper posterior margin to the elevation on side of rostrum marking root of incisor relatively much less. Plate forming outer wall of foramen relatively wider than in D. incomptus, its anterior border concave below, abruptly convex above, but this convexity never forming a pointed hook as in the only specimen of D. incomptus at hand. Posterior extremity of nasals in line with center of lachrymals, thus falling short of tips of nasal branches of premaxillaries by about 1.5 mm. In D. incomptus the nasals extend back to extremity of premaxillaries. Bony palate

very narrow, its width about equal to that of first upper molar. It is traversed by two deep longitudinal grooves. Pterygoids straight, slightly convergent posteriorly. Audital bullæ relatively smaller and more globular than in *D. incomptus*. Mandible less robust than that of *D. incomptus*, the coronoid process shorter (rising scarcely above tip of articular process) and articular process much narrower.

Teeth.—The teeth are exactly as in D. incomptus, except that all are distinctly less robust. Anterior face of incisors paler orange than in D. incomptus.

Measurements.—External measurements of type: total length 302; tail vertebræ 151; hind foot 35 (32); ear from meatus 16.5; ear from crown 13; width of ear 17. Average of four specimens from the type locality: total length 306.5 (302-316); tail vertebræ 153 (151-156); hind foot 34 (33-35); hind foot without claw 30.4 (29-32).

Cranial measurements of type: greatest length 35 (37); basal length 32 (34); basilar length 30 (32); palatal length 16.8 (18.4); palatal width between anterior molars 2.2 (2.4); diastema 10 (11.4);

<sup>&</sup>lt;sup>1</sup>Measurements in parentheses are those of an adult *D. incomptus* from Port Natal (topotype of *D. gueinzii*).

length of incisive foramen 7.4 (8.4); combined width of incisive foramina 2 (2.2); length of nasals 13 (14.4); combined breadth of nasals 4 (4); zygomatic breadth 17 (19); mastoid breadth 13.6 (13.8); interorbital breadth 4.6 (4.6); breadth of braincase above roots of zygomata 13.8 (14); depth of braincase at front of basioccipital 10.8 (10.6); frontopalatal depth at posterior extremity of nasals 9 (10); least depth of rostrum behind incisors 6.4 (6); maxillary toothrow (alveoli) 7.4 (8); breadth of first upper molar 2.2 (2.8); mandible 20.4 (22); mandibular toothrow (alveoli) 7 (8).2

Specimens examined .- Six, all from the type locality.

Remarks.—Dasymys rufulus differs so widely from the large, dark D. incomptus as to need no special comparison. It apparently more closely resembles D. bentleyæ, a species which I have not seen, though readily distinguishable by its shorter tail and smaller ears. In color D. bentleyæ is merely said to resemble Peters' plate of Dasymys gueinzii, a statement sufficiently vague to cover much specific variation. The plate, however, shows no trace of the red suffusion of the dorsal surface so conspicuous in D. rufulus.

## LEGGADA MUSCULOIDES (Temminck).

1888. Mus musculoides JENTINK, Notes from the Leyden Museum, x, p. 44.

The collection contains two specimens, an adult female and a half-grown young. The former measures: total length 105; tail vertebræ 46; hind foot 13.8 (13); ear from meatus 9; ear from crown 7.4; width of ear 8.

## ARVICANTHIS PULCHELLUS (Gray).

1888. Mus barbarus Jentink, Notes from the Leyden Museum, x, p. 44.

Mr. Currie secured four individuals of this species, three adults and one young. The adults give the following average and extreme measurements: Total length 256 (244-268); tail vertebræ 129 (126-134); hind foot 28.1 (27-29); hind foot without claws 26.3 (25-28).

## ARVICANTHIS PLANIFRONS sp. nov.

Type.—Adult male (skin and skull) no. 83814, U. S. National Museum. Collected at Mount Coffee, Liberia, Africa, April 26, 1897.

Characters.—Similar externally to Arvicanthis univitatus (Pe-

<sup>2</sup> Some of the cranial measurements of *D. bentleyæ* given in the original description are: basal length 31.5; greatest breadth 18; nasal length 13.8; interorbital breadth 4; palatal length 19.6; diastema 10.3; palatine foramina 8.1; length of upper molar series 6.5.