ALLEN (H.)

COMPLIMENTS OF
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ON A NEW SPECIES OF AMETRIDA.

BY HARRISON ALLEN.

Ametrida minor sp. nov. Coloration almost white. The third phalanx of the third finger is nearly twice the length of the second. The third phalanx of the fourth finger is a third longer than the second. Much smaller, as a whole, than *A. centurio*. The horizontal plate of the palatal bone is not deficient behind, but extends slightly back of a line which

Fig. 1. Ametrida minor H. Allen.

unites the last molars. The posterior nares are remarkably small, being contracted to mere pinhead diameters. The superior incisors do not fill in the space between the canines.

Locality unknown. Type, a male, mature individual in alcohol. Fig. 1. Museum of the Boston society of natural history.

Ametrida (*A. centurio*) was founded by J. E. Gray (Ann. and mag. nat. hist., ser. 1, v. 19, p. 407, 1847), apparently on a single alcoholic specimen from Brazil. The account is short and unsatisfactory. W. Peters (Monatsber. akad. wiss. Berlin, 1866, p. 396) more fully redescribed the genus from a single dried skin (without locality) in the Leyden museum. G. E. Dobson[1] (Cat. Chir. Brit. mus., 1878) gives an extended account of Ametrida, but refers to a single individual from Brazil probably the type specimen. Peters, contrasting Ametrida with Sphaeronycteris (Monatsber. akad. wiss. Berlin, 1882, p. 987) employs characters not used in his first description; one can only assume that additional material had passed under his observation.[2]

Thus the bibliography of the genus is scant. In the long period intervening between 1847 and 1893 but two individuals are mentioned by authors.[3]

The general aspect is that of a species of Stenoderma, but the second metacarpal bone is abruptly bent with a convexity outward. All the measurements tend to be larger than *A. centurio*. The third phalanx of the third digit is little more than half the length of the second. The second phalanx of the fourth digit is longer than the first.

[1] Dobson states that the palatal bone in *Ametrida centurio* is deficient behind, and since he is in doubt as to the propriety of separating Ametrida from Stenoderma, it is probable that this deficiency is similar to that in Stenoderma and amounts to a deep sinuosity of the posterior palatal border. In the Leyden specimen, the parts were said to be mutilated; yet Peters in his second paper states that the border is scarcely cut out.

[2] Sphaeronycteris resembles Ametrida in the general shape of the skull, in the number of teeth, in the rounded head, in the general shape of the ears and tongue, the manner of attachment of the wing membrane to base of toes, in the short calcar, in the deeply incised interfem, and in the skin-formations about the nose-leaf. But the nose-leaf of itself and the physiognomy are quite distinct. The anterior temporal crest is extraordinarily widened; the nose-leaf is surrounded above, and the plicae of the face suggest a disposition of parts as in *A. centurio*. The tragus is more sinuate on the outer border. The incisive foramen is very small; the posterior border of the palate reaches the level of the second molar; the breadth of the basicranium between the cochleae is as wide as the exposed portion of the cochleae themselves. The coronoid process of the lower jaw is higher than in Ametrida.

[3] Since our knowledge of the genus is as yet imperfect, I have thought it best to give the characters of *Ametrida centurio* as gleaned from Peters. It is as follows: posterior palatal border scarcely incised; basicranium very small, not so wide as the cochlear exposure; anterior temporal crest marked; interfemoral membrane incised; general coloration of the fur brown.

The characters of the head, ears, nose-leaf, and even the gland-like swelling on the front of the thorax, are as in *A. centurio*. The warts on the lower lip are six in number instead of seven as in that species. In comparison with the figure given by Dobson they are not well defined. The markings of the wing membranes are as in other species of Stenodermatidae, excepting that the mesopatagium is furnished with eleven long, nearly vertically disposed muscle-lines which converge to a single point near the forearm.

The terminal cartilages are filiform. The pigment is absent in the first and second digital interspaces.

The gland-mass at the other side of the nose-leaf is raised on a skin fold as in Ectophylla. The glands, three in number, are lodged well up on the face and occupy a groove between the eye and the nose-leaf.

Teeth. Peters in his description of *Ametrida centurio* describes a small "basal cusp" on the maxillary central incisor, and a bilobed minute lateral incisor; the lower premolars are not of the same form and size, the second being smaller than the first. These characters are not found in *A. minor*, in which species the superior lateral incisor is nearly half the length of the central. Dobson gives a description to which the teeth of the new species conform for the most part, but I find the intervals between the maxillary centrals too great to accept the statement that the teeth fill up by their bases the wide space between the canines. I infer that the London and Leyden specimens are not so much alike as are the London and the Boston examples, so far as the characters of the teeth are concerned.

Rugae two in number; the rest of the hard palate being occupied with minute mammilations as in Sphaeronycteris. Fur above including the head is of a dull white; the hair is long, the extreme tip and base having a delicate shade of brown. Beneath, a conspicuous patch pure white in color lies on the ventral aspect of each shoulder. A covering of short hair is seen on the wing membrane extending from the trunk to the distal third of the humerus and almost to the knee. This distribution is noteworthy from the fact that it is not distinctive from that of the back of the trunk, but the hair in the region just named extends upon that of the wing membrane so that no limitation between the trunk and the membrane can be detected. The fleshy part of the forearm

is sparsely furred. The rest of the membrane is naked except the inferior border of the wing membrane where a delicate fringe of hair is seen. The remainder of the ventral aspect is much darker (with tawny brownish shades prevailing) than on the back; the hair toward the side of the trunk (mammary line) is much longer and deeper in shade than elsewhere. The hair is unicolored. It extends in an abruptly defined, sparse layer on the wing membrane as far as the end of the fleshy part of the forearm and to the wing membrane just beneath it and thence obliquely downward and inward to the knee.

The dorsal aspect of the interfemoral membrane, the thighs, and legs are covered with hair. This is sparse over the limbs, but better developed over the membrane, especially at the middle third.[1] The under surface is nearly naked but the thighs are thickly furred in a manner unusual in the family. The abruptly bent metacarpal bone of the second digit is the most striking character in the skeleton. The penis is not pendant but directed upward parallel to the abdomen. The prepuce is half withdrawn from a subconical glans.

MEASUREMENTS.

	A. minor	*A. centurio*[2]
Head and trunk	35 mm.	40 mm.
Head	13	15
Ear, height of	11	
Tragus	4	4
Nose-leaf height	7	
" width, under part	5	
Length of trunk	26	
Forearm	24	32
1st digit, thumb	9	9
1st digit, metacarpal	3	
1st digit, phalanx	6	
2d digit, metacarpal	14	
2d digit, phalanx	6	
3d digit, metacarpal	23	29
3d digit, 1st phalanx	8	11
3d digit, 2d "	13	17
3d digit, 3d "	7	14

[1] The Leyden specimen is stated by Peters to be sparsely haired only on the interfemoral membrane.

[2] Calculated from the English scale as given by Dobson.

4th digit	metacarpal	20	26
	1st phalanx	9	10
	2d "	12	7
5th digit	metacarpal	21	27
	1st phalanx	8	11
	2d "	10	14
Tibia		13	16
Calcar		4	5
Foot		9	8

Since the above diagnosis was written out, I have made a detailed study of the skull. The division into metacephalic and mesocephalic portions is well defined, but the procephalic is absent. The brain case is greatly expanded, and the face is correspondingly narrowed.

View from in front (*norma frontalis*, fig. 2.) The temporal

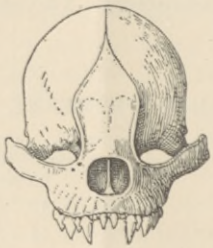

Fig. 2.

crest is faintly defined at anterior third of the sagitta. Posterior line is absent; the anterior line is trenchant and extends well down to the inner wall of the orbit where it is continuous with the orbital crest. The ridge at the position of the postorbital process as seen in some genera, as those of the Emballanuridae and in *Pteropus leucocephalus*, is bolder than elsewhere but is directed upward and outward rather than downward and outward. The two ridges diverge in such wise as to define a shield-like space on the frontal bone. The anterior nasal aperture is large, well carried up toward the orbits, thus showing the presence of small, broad nasal bones. The zygomatic arches are boldly expanded laterally.

The sides of the skull (*norma lateralis*, fig. 3) show the pos-

Fig. 3.

terior half of the brain case sloping markedly toward the occiput, the superior semicircular line of which lies well down toward the base; the bone below it inclining slightly toward the foramen magnum as in the pteropine bats. The anterior half of the brain case is convex, and the curve ends abruptly at the level of the ethmoidal foramen.

The nasal bones project at the anterior nasal aperture; the horizontal and ascending limb of the lateral borders of this aperture are about equal. The ascending limb is slightly oblique and concave. The upper border of the wide zygoma is rugose at the position of the ascending process. The alveolar border of the maxillary is nowhere horizontal but inclined upward and forward from second molar and upward and backward for the short distance answering to this tooth.

The base of the skull (*norma basilaris*, fig. 4) exhibits a large

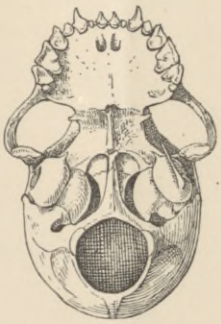

Fig. 4.

circular foramen magnum, a narrow oblique basilar process with deep lateral depressions. Tympanic bones small, half covering

the petrous bone but in firm contact therewith. Zygomatic arches expanded and acutely bent. Pterygoid fossa not distinguishable from the mesopterygoid; a median ridge lies directly back of the exceedingly minute posterior nares. The hard palate wider than long and faintly incised between the scarcely produced palatines. The lower jaw possesses a high acute coronoid process. The condyloid process carried back slightly beyond the line of the angle which is deflected outward. .

MEASUREMENTS OF THE SKULL.

Length	15 mm.
Greatest width	5
Length of face from fronto-nasal junction to the alveolar point	4.50
Bimalar breadth	10
Length of hard palate	5
Width of hard palate at the last molars	4
Glenoido-alveolar length	6.02