Vol. 78, pp. 95–98 8 October 1965

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

CONSPECIFICITY OF *PLAGIODONTIA AEDIUM* AND *P. HYLAEUM* (RODENTIA)

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In May, 1948, G. H. H. Tate (Jour. Mamm., 29: 176–178) reported two specimens of *Plagiodontia*, then alive in the collection of the New York Zoological Society. These two specimens (now American Museum of Natural History nos. 150016 and 150017, each a study skin and skull) are from the mountains of southern Haiti. Tate tentatively identified the two specimens as *Plagiodontia hylaeum*. In June, 1948, D. H. Johnson published a synopsis of the species of *Plagiodontia* (Proc. Biol. Soc. Washington, 61: 69–76).

The two specimens originally reported by Tate have now been compared, through the courtesy of Dr. David H. Johnson, with: (1) a series of nine specimens of *Plagiodontia hylaeum*; (2) the types of *Plagiodontia* in the U.S. National Museum, namely *P. spelaeum* Miller and *P. ipnaeum* Johnson, both of which are known only as fossils, and *P. hylaeum* Miller, which is presumably still living; (3) the specimen (USNM no. 282552) of *Plagiodontia aedium* F. Cuvier reported by Johnson; and subsequently, through the courtesy of Mr. Robert Grant Jr., (4) one additional specimen (not catalogued) from Haiti in the Academy of Natural Sciences of Philadelphia.

These comparisons provide new knowledge regarding variation and relationships in the genus *Plagiodontia*.

No. 150017 is atypical in color, being light orange brown and having pink eyes as described by Tate. No. 150016 matches the type of *P. hylaeum* in color of pelage. Both specimens match *P. hylaeum* in shape

and size of feet, and form of claws. Plantar and palmar granules seem larger than in *P. hylaeum*. At least part of the difference between *P. hylaeum* and *P. aedium* in size of granules on feet and tail and in apparent size of feet is attributable to the method of preservation; the specimen of *aedium* is in fluid, the specimens of *hylaeum* are dry. The difference in claws may have been caused by different amounts of wear. A difference in the length of the tail of 5 mm or even of 7 mm is not to be regarded as significant; the tail measurements taken by the preparator are 145 mm in no. 150016 and 152 mm in no. 150017. Other measurements, in mm, of these two specimens are respectively: total length 488 and 493, and length of hind foot 67 in both. The ears cannot be observed in these two specimens. In short, no external difference is well established between the two living species of *Plagiodontia*.

In regard to the skull and teeth Johnson noted that *aedium* differed from *hylaeum* in (1) smaller size, (2) almost obsolete postorbital processes, (3) evenly arched zygomata, (4) weaker rostrum, (5) palatal pits in line with back of first molar, rather than forward of this line, (6) U-shaped, rather than V-shaped anterior margin of pterygoid vacuity (7) not extending anteriorly beyond level of posterior margin of alveolus of M^3, (8) shallower mandibular sulcus between articular and coronoid processes, (9) incisors narrower, (10) occlusal surfaces of cheek teeth smaller, (11) toothrows more nearly parallel, (12) less tendency toward reduction of posterior teeth, (13) presence of incipient fold at anterolateral corner of Pm^4, (14) absence of fold at posterolateral corner of M^3, (15) tips of labial and lingual folds of lower cheek teeth less pointed, and (16) sides of these folds less sinuous. The two new Haitian specimens (AMNH nos. 150016 and 150017) agree with *aedium* in characters 4, 5, 6, 8, 13, 15, and 16; they agree with *hylaeum* in characters 1, 2, 3, 10, 11, and 14. Of the other three characters, 7 is not characteristic of all *hylaeum* examined and in this character 150016 agrees with the usual condition of *hylaeum* while 150017 agrees with *aedium*. In character 9 specimen 150016 again agrees with *hylaeum* and again 150017 agrees with *aedium*. In character 12 both specimens are intermediate but seem nearer to *aedium*. In larger auditory bullae both specimens resemble *hylaeum*. In the aggregate of characters the two specimens seem slightly nearer *hylaeum*. However, considering that only three specimens of *aedium* have ever been reported and that only one is used in the above comparisons, the most notable fact is that the new Haitian specimens are nearly intermediate between and do combine the presumed characters of *P. hylaeum* and *P. aedium*. The exact locality in southern Haiti of the two new specimens is not known.

Karl F. Koopman kindly brought the following specimen to my attention. An uncatalogued specimen at the Academy of Natural Sciences of Philadelphia was obtained by Anthony Curtiss at Miragoane in Haiti, as was USNM no. 282552. The specimen was originally in preservative and was later prepared as a study skin and skull by W. V.

Kohler. It is an adult female and was obtained on "7-8-49." Measurements, in mm, taken by the preparator were: total length 452, length of tail 140, length of hind foot 69, length of ear from crown 8. A note on the label indicates that the stomach was filled with finely chewed plant material and that the right arm of the uterus had a swollen area 12 mm in diameter. The pelage is slightly paler than that of AMNH no. 150016, and only slightly paler ventrally than dorsally. The scales on feet and tail resemble those of AMNH no. 150016. The claws are relatively long and sharp. The pinnae have a distinct marginal fringe of hairs. In seven of the sixteen cranial and dental characters listed above, the Philadelphia specimen resembles *aedium* (characters 2, 3, 5, 11, 13, 15, and 16) and in nine characters it resembles *hylaeum* (1, 4, 6, 7, 8, 9, 10, 12, and 14).

This specimen, like the two American Museum specimens, combines characteristics of *aedium* and *hylaeum*. The only characters that distinguish all four Haitian specimens from *hylaeum* are cranial characters 5, 13, 15, and 16.

Unless, and until, new material shows a better separation of the two forms the most reasonable interpretation is that the living *Plagiodontia* are of one species. Available Haitian material then is referred to *Plagiodontia aedium aedium* F. Cuvier, 1836, and available Dominican Republic material is referred to *Plagiodontia aedium hylaeum* Miller, 1927.