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LAWRENCE

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## A New Subspecies of the Black Myotis (Bat) From Eastern Mexico

[71]

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E. RAYMOND HALL AND TICUL ALVAREZ

In 1928 when Miller and Allen (Bull. U. S. Nat. Mus., 144) published their revisionary account of American bats of the genus *Myotis*, the black myotis, *Myotis nigricans*, was known no farther north than Chiapas and Campeche. Collections of mammals made in recent years for the Museum of Natural History of The University of Kansas include specimens of *M. nigricans* from eastern Mexico as far north as Tamaulipas. Critical study of this newly acquired material reveals that it pertains to an hitherto unnamed subspecies that may be named and described as follows:

### *Myotis nigricans dalquesti* new subspecies

*Type*.—Male, adult, skin and skull, No. 23839 Museum of Natural History, University of Kansas; from 3 km. E of San Andrés Tuxtla, 1000 ft., Veracruz; obtained on January 5, 1948, by Walter W. Dalquest, original No. 8444.

*Range*.—Tropical Life-zone of eastern México from southern Tamaulipas to central Chiapas.

*Diagnosis*.—Color black or dark brown, venter having brownish wash; size large (see measurements); M1 and M2 quadrangular; prominent protostyle on P4; P2 and P3 in straight line; sagittal crest absent.

*Comparison*.—Color almost as in *Myotis nigricans extremus*, the subspecies occurring adjacent to *dalquesti* in Chiapas and Tabasco. From *M. n. extremus*, *dalquesti* differs as follows: larger; hypocone in M1 and M2 broader making posterointernal part less rounded; protostyle of P4 prominent instead of absent; P3 in line with C and P2 instead of displaced lingually; sagittal crest absent instead of present posteriorly. *Myotis nigricans nigricans* and *M. n. dalquesti* are of approximately equal size; otherwise they differ in the same features as do *extremus* and *dalquesti*.

*Measurements*.—Average and extreme measurements of seven males from the type locality, followed by those of 19 females from 38 km. SE Jesús Carranza, and finally length of forearm and cranial measurements of eight female topotypes of *M. n. extremus*, are as follows: Total length, 80 (77-82), 76 (72-80); length of tail, 32.8 (30-35), 33.5 (31-35); hind foot, 7.9 (7-8), 8.0 (8-8); forearm, 34.2 (33.6-35.3), 35.1 (33.1-36.4), 33.1 (31.8-34.3); greatest length of skull (including incisors), 13.8 (13.3-14.1), 13.6 (13.2-14.1), 12.9 (12.6-13.1); zygomatic breadth, 8.1 (7.9-8.4), 8.1 (7.9-8.3), 8.0 (only one can be measured); width of rostrum above canines, 3.2 (3.1-3.3), 3.2 (3.0-3.4), 3.1 (3.0-3.2); interorbital constriction, 3.6 (3.5-3.7), 3.6 (3.5-3.8), 3.4 (3.3-3.4); occipital depth (excluding auditory bullae and sagittal crest), 4.6 (4.4-4.8), 4.6 (4.3-4.9), 4.3 (4.1-4.6); maxillary tooth-row (C-M3), 5.0 (4.8-5.1), 5.0 (4.8-5.2), 4.7 (4.6-4.8); maxillary breadth at M3, 5.2 (5.1-5.4), 5.3 (5.1-5.5), 5.1 (4.8-5.2).

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FIG. 1. Left side of skull, incisors, canine, and premolars  $\times 11$ , and occlusal surface of left first upper molar  $\times 20$ . A. *Myotis nigricans dalquesti*, holotype. B. *Myotis nigricans extremus* No. 77674 USNM, topotype.

*Remarks.*—The subspecific name *dalquesti* is given in recognition of Prof. Walter W. Dalquest who gathered the largest and most varied collection of mammals ever taken in the state of Veracruz.

Inspection of the measurements given above will reveal that there is no overlap between *extremus* and *dalquesti* in the interorbital constriction or occipital depth and only slight overlap in the length of the maxillary tooth-row and maxillary breadth.

In 10 adult females from Ocosingo, Chiapas, there is suggestion of intergradation between *dalquesti* and *extremus* in that one specimen (66515 KU) has the cranial characters of *extremus* except that it is large like *dalquesti*; in two other skulls P3 is slightly displaced lingually and two other skulls bear a slight sagittal crest. These are features characterizing *extremus*. Otherwise the specimens resemble *dalquesti*, to which subspecies they are here referred.

Three males from a place 8 km. W and 10 km. N El Encino, 400 ft., Tamaulipas, are the northernmost representatives of the species and differ from the other specimens of *dalquesti* in shorter forearm, shorter maxillary tooth-row and lesser maxillary breadth.

Study in the laboratory was supported by Grant No. 56 G 103 from the National Science Foundation. Field work was supported by a grant from the Kansas University Endowment Association. We thank Dr. David H. Johnson for lending eight topotypes of *M. n. extremus*. Other specimens of *extremus* available to us are as follows: 1 mi. E Teapa, Tabasco, 1 (7535 LSU—courtesy of Dr. George H. Lowery, Jr.); Cayo Dist. Augustine, British Honduras, 1 (9670 KU, in red phase); 12 km. NNW Chinajá, Guatemala, 4.

*Specimens examined.*—Total, 142, as follows: Tamaulipas: 8 km. W, 10 km. N El Encino, 400 ft., 5. Veracruz: 4 km. WNW Fortín, 3200 ft., 1; 2 km. N Motzorongo, 1500 ft., 1; 3 km. E San Andrés Tuxtla, 1000 ft., 7; 38 km. SE Jesús Carranza, 500 ft., 118. Chiapas: Ocosingo, 10.

*Transmitted June 30, 1961.*



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