4-1972

# The Phyllostomatid Bat, *Vampyressa brocki*, in Colombia

Robert J. Baker
*Texas Tech University*, rjbaker@ttu.edu

Hugh H. Genoways
*University of Nebraska - Lincoln*, h.h.genoways@gmail.com

Alberto Cadena
*University of Kansas Main Campus*

Reprinted from BULLETIN OF THE SOUTHERN CALIFORNIA ACADEMY OF SCIENCES
Vol. 71, No. 1, April 1972
p. 54
*Made in the United States of America*

# THE PHYLLOSTOMATID BAT, *VAMPYRESSA BROCKI*, IN COLOMBIA

The species *Vampyressa brocki* was described from Guyana by Peterson (Life Sci. Contrib., Royal Ontario Mus., 73:1–17, 1968) on the basis of a single female. Subsequently, a male was obtained in Guyana (Peterson, Canadian Jour. Zool., 50:in press, 1972) and the species presently is known only from these two specimens. Between 28 June and 1 July 1969, while conducting studies on the karyotypes of phyllostomatid bats, we collected three additional specimens of this species in mature tropical rainforest at Leticia, Amazonas, Colombia. These bats were taken in mist nets at a height of no more than 3.5 meters over footpaths through the forest.

The measurements of our specimens (all adult females) TTU 8827, TTU 8832, and TTU 9047, respectively, as follows: Length of forearm, 35.4, 32.1, 33.2; length of hind foot, 8.5, 8.5, 9.5; length of ear, 11.0, 11.0, 11.5; greatest length of skull (including incisors), 18.4, 18.3, 18.4; condylobasal length, 16.0, 15.8, 16.2; zygomatic breadth, 10.9, 10.8, 10.7; breadth of braincase, 8.4, 8.4, 8.0; mastoid breadth, 9.4, 9.4, 9.5; interorbital constriction, 4.6, 4.6, 4.9; postorbital breadth, 4.9, 4.7, 5.1; breadth across molars (M1–M1), 7.9, 7.6, 7.8; breadth across canines (C–C), 4.2, 4.2, 4.3; length of maxillary toothrow (C–M2), 5.7, 5.7, 5.7; palatal length (including incisors), 8.0, 8.2, 8.0; length of mandibles (condylo-incisive), 11.5, 11.5, 11.0; height of ramus, 3.7, 3.6, 3.7.

In all measurements, our females closely resemble those given for Guyanan specimens by Peterson (1968, 1972). However, in the key provided by Peterson (1968:13), bats with a forearm greater than 34 mm would be identified as *Vampyressa nymphaea*. One of our specimens has a forearm length of 35.4 but its greatest length of skull (18.4) identifies it as *V. brocki*, which is distinctly smaller than *V. nymphaea* in cranial dimensions.

In other characters, such as number of lower incisors, size and shape of lower premolars and m2, and absence of m3, our specimens are identical with those reported by Peterson. A dorsal stripe is present, but faint, in our specimens. The facial markings appear to be somewhat less distinct than those of the holotype as illustrated by Peterson (1968).

The karyotype of *V. brocki* is shown in figure 1. The diploid number is 24 and the fundamental number is 44. This karytoype is similar to that of *V. nymphaea* from Nicaragua and Honduras, which have a diploid number of 26 and a fundamental number of 48. *Vampyressa pusilla* from Leticia, Colombia, have a diploid number of 23 (males) or 24 (females), with a fundamental number of 24. Although the degree of chromosomal divergence between *V. brocki* and *V. nymphaea* does not necessarily imply that the two taxa are specifically distinct, such divergence is typical of populations representing different species in the family Phyllostomatidae. Further, these chromosomal data suggest that *V. brocki* and *V. nymphaea* are more closely related to each other than either is to *V. pusilla.* These relationships were suggested by Peterson (1972).

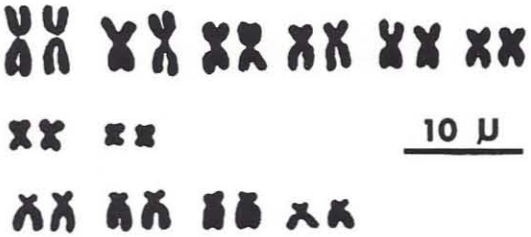


*Figure 1.* Representative karyotype of a female *Vampyressa brocki* from Leticia, Colombia.

Two females were pregnant when taken on 30 June and 1 July. The single embryo in each was minute. None of the three specimens evinced molt.

We thank C. J. Marinkelle of the Universidad de Los Andes for assistance during this study.

ROBERT J. BAKER and HUGH H. GENOWAYS, *Dept. Biology and The Museum, Texas Tech University, Lubbock, Texas 79409*, and ALBERTO CADENA, *Museum of Natural History, The University of Kansas, Lawrence, Kansas 66044.*

Accepted for publication April 1, 1972.