SHORT COMMUNICATION

Albinism in the Japanese Large-footed Bat
Myotis macrodactylus

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(Accepted 14 February 1991)

Specimens of both partial albino bats (e.g., Metzger, 1956; Dorst, 1957; Imaizumi et al., 1966, 1967; Kuramoto, 1967; Obara, 1983) and true albino bats (e.g., Setzer, 1950; McCoy, 1960; Heatwole et al., 1964; Oyabu, 1982; Mukohyama, 1990; Sawada, 1990) have been already reported.

Partial albinos of the Japanese large-footed bat Myotis macrodactylus have been reported in detail with regard to their frequency in the population and the location of the white fur (Kuramoto, 1967). A true albino of this species has been found for the first time. This albino was captured alive by the authors on 15 July 1990 in an abrasion cave near Sanze, Tsuruoka, Yamagata Prefecture. In this cave, two kinds of bats, the Japanese large-footed bat and the Japanese long-fingered bat Miniopterus schreibersii fuliginosus formed a mixed maternity colony. The number of the former species seemed to be about one hundred individuals and the latter about 10,000. In general, cave bats form dense mixed colonies consisting of different species at rest in all seasons except winter (Uchida & Kuramoto, 1968; Kuramoto et al., 1969, 1978). The true albino bat was readily detected by its color in the large colony consisting mostly of M. schreibersii fuliginosus.

The true albino specimen totally lacked pigment of the fur, skin, and claws; the pelage was completely white, and the eyes were pink as well as the face, ears, legs, tail, forearms, and fingers. The patagium was semitransparent except for blood vessels distributed through it (Fig 1). Almost no difference was found between the white-furred specimen and ordinary bats in flying ability and in morphological features such as the forearm length (36 mm) and wingspan. The specimen was kept alive for two months in captivity.

The conventional, G- and C-banded karyotypes of the true albino specimen were analysed. Based on observations of 30 metaphases, the chromosome number of this specimen was 2n = 44, FN = 52 as in non-albino specimens examined so far (Sasaki & Hattori, 1970; Harada, 1973; Obara et al., 1976; Harada & Yosida, 1978). The chromosomal complement seemed normal in both the numerical and the structural aspects. The G-band patterns of the
Fig. 1. Close-up of the face (a), dorsal (b), and ventral (c) views of the true albino large-footed bat, and ventral view (d) of a normal-colored bat.
specimen were identical with those previously reported (Harada & Yosida, 1978), and there was no detectable difference in the C-band patterns, either (Harada & Yosida, 1978; Andô et al., 1980).

Acknowledgments

We thank Mr. Sigeo Satoh and Mr. Satoshi Satoh for their cooperation in collecting the specimen. This work was supported in part by a Grant-in-Aid for General Scientific Research from the Ministry of Education, Science and Culture, Japan (No. 02808008).

References