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A CASE OF ALBINISM IN THE FIVE-STRIPED PALM SQUIRREL
FUNAMBULUS PENNANTI WROUGHTON

(With Plate XVII)

Instances of albinism in mammals have drawn the attention of many workers since early this century (Milne, 1905 ; Harrison, 1905 ; Rajagopalan, 1967 and Khajuria, 1973). This phenomenon is yet unknown in the Five-striped squirrel, *Funambulus pennanti* Wroughton, a species widely distributed in northern India. Recently, however, we have come across an albinistic individual of this species through the courtesy of Mr. C. Sharfuddin of Patna, and it is described here.

All the measurements are in millimetres.

Material : One female, Chandigarh, India ; collected and owned by Mr. C. Sharfuddin, Patna, Bihar ; April, 1981.

External measurements : Head and body 151, tail 161, hindfoot 40, Ear 14.

Cranial measurements : Occipitonasal length 36.5, condylobasal length 36, palatal length 19.5, palatal width 9, diastema 8.5, anterior palatal foramina 2, bulla 7.5, nasal length 11, nasal width 4.5, upper tooth row 7.5, orbital length 12, least interorbital width 11.5, zygomatic width 21.5, cranial width between posterior zygomatic roots 17.5, postmolar length 17, frontals width behind postorbital bars 14.5, mandibular length 21.5, lower tooth row 7.5.

Colour : The whole body is covered with soft and spotless white fur. The dorsal and

ventral colour do not show any difference. The dorsum, which is striped in normal case, does not show even the remotest sign of striped pattern.

The freshly killed specimen showed pink eyes (Characteristic of true albinism). The naked skin areas such as rhinarium and anal openings etc. also bore a pinkish tinge, even the nails were of pale colour.

The external and cranial measurements were compared with those of *F. pennanti* and *F. palmarum*. The specimen differs from *F. palmarum* in various cranial characters specially by larger bullae (under 1/5 of occipitonasal length in *F. palmarum*—Agrawal, 1967). It tallies well with *F. pennanti* in all respects.

Albinism is known to be a genetical phenomenon in which due to an autosomal recessive gene pigments fail to develop. Rajagopalan (1967) opines that albinism carries with it the trait of tameness. Hutt (1969) considers it an indication of infertility.

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REFERENCES

- AGRAWAL, V. C. 1967. Taxonomic study of skulls of oriental rodents in relation to ecology. *Rec. Indian Mus.*, **60** : 125-326.
- HARRISON, J. L. 1950. The occurrence of albino and melanic rats. *J. Bombay nat. Hist. Soc.*, **49** (3) : 548.
- HUTT, F. B. 1969. Genetic aspects of infertility. In—Benirschke, K. ed., *Comparative mammalian cytogenetics*, Springer-Verlag, New York.
- KHAJURIA, H. 1973. Albinism in the Lesser Rat-tailed bat, *Rhinopoma h. hardwickei* Gray (Chiroptera : Rhinopomatidae). *J. Bombay nat. Hist. Soc.* **70** (1) : 197.
- RAJAGOPALAN, P. K. 1967. A case of albinism in *Rattus blanfordi* (Thomas, 1881) (Rodentia : Muridae). *J. Bombay nat. Hist. Soc.*, **64** (3) : 554.
- MILNE, C. J. R. 1905. Albinism in the Black-buck. *J. Bombay nat. Hist. Soc.*, **16** (4) : 472.

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