

Sighting of melanistic squirrel in Bengaluru Rural district, Karnataka



Melanistic squirrel spotted near Devanahalli

The Three-striped Palm Squirrel (TSPS), *Funambulus palmarum* Linnaeus is greyish brown with three pale parallel lines on its back from head to tail and pale underparts. Additionally, it has black-and-white peppered tail and has a bold reddish-brown mid-ventral line running through the tail (Menon 2014). The common commensal squirrel of peninsular India is adapted to living close to human settlements (Menon 2014). During a roving survey on insect pests in different horticultural ecosystems in March 2013, a melanistic squirrel was spotted climbing on the stone walls of a well in a village in Devanahalli Taluk of Bengaluru Rural District by one of our field assistants Mr. Chethan. It could be idenitifed based on its peppered tail and the reddish-brown colour at the base of the tail. The individual seems to be a young one. Of the 17 cases of colour aberrations reported under Sciuridae in a review on colour aberrant mammals there is only one reference with regard to TSPS exhibiting leucism (Mahabal et al. 2019) reported from Tamil Nadu (Samson et al. 2017). The concentration and distribution of melanin results in an aberrant colour (van Grouw 2013). Leucism is a total lack of pigmentation in the whole body due to an inherited defect in the pigment transfer process effecting white or whitish hair, pale skin, but normal coloured eyes while Melanism is the opposite condition of albinism wherein there is an excessive synthesis of melanin pigment in the skin resulting in a melanistic animal (van Grouw 2006, 2013; Abreu et al. 2013; Lucati & Lopez-Baucells 2016; Mahabal et al. 2016). Although the spotting of the melanistic squirrel was done in 2013 during my association with the Indian Institute of Horticultural Research (IIHR) as a Research Associate, the review by Mahabal et al. (2019) triggered the compilation of this article, firstly its data compilation as a review and the data deficiency in reporting of melanistic mammals from Karnataka.

References

Abreu, M.S.L., R. Machado, F. Barbieri, N.S. Freitas & L.R. Oliveira (2013). Anomalous colour in Neotropical mammals: a review with new records for *Didelphis* sp. (Didelphidae, Didelphimorphia) and *Arctocephalus australis* (Otariidae, Carnivora). *Brazilian Journal of Biology* 73: 185–194.

Lucati, F. & A. López-Baucells (2016). Chromatic disorders in bats: a review of pigmentation anomalies and the misuse of terms to describe them. *Mammal Review* 47(2): 112–123.

Mahabal, A., H. van Grouw, R.M. Sharma & S. Thakur (2016). How common is albinism really? Colour aberrations in Indian birds reviewed. *Dutch Birding* 38: 301–309.

Mahabal, A., R.M. Sharma, R.N. Patil & S. Jadhav (2019). Colour aberration in Indian mammals: a review from 1886 to 2017. *Journal of Threatened Taxa* 11(6): 13690–13719. https://doi.org/10.11609/ jott.3843.11.6.13690-13719

Menon, V. (2014). *Indian Mammals-a Field Guide*. Published by Hachette India.

Samson, A., B. Ramakrishnan & S. Bargavi (2017). Leucism in the Three-striped Palm Squirrel (*Funambulus palmarum*) at Gudalur Forest Division, Tamil Nadu, southern India. *Therya* 8(3): 261–262. van Grouw, H (2013). What colour is that bird? The causes and recognition of common colour aberrations in birds. *British Birds*, 106: 17–29.

M. Jayashankar

Assistant Professor, Department of Zoology, St. Joseph's College (Autonomous), 36, Lalbagh Road, Bengaluru, Karnataka 560027, India. Email: jay81zoology@gmail.com

Citation: Jayashankar, M. (2019). Sighting of melanistic squirrel in Bengaluru Rural district, Karnataka. Small Mammal Mail #422, In: *Zoo's Print* 34(9): 06–07.