A case of total albinism in the Bonnet Macaque *Macaca radiata* (Geoffroy) from Goa

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In general, the albinism as a phenomenon of the lack of colour pigmentation resulting from the inability to synthesize the melanin and caused by the absence of dominating allele among mammals of India (Smielowski 1987). Further, a condition in which there is a simultaneous complete absence of melanin from eyes, skin, feathers (as in birds, Heimo 2003) and hairs, fur (as in mammals) is categorized as total albinism. Its occurrence in the wild is rare. During the faunistic survey of Goa state in November 2002, we came across a white-albino Bonnet Macaque, *Macaca radiata* (Geoffroy) (Primates: Cercopithecidae) near Valpoi village (Lat. 15° 31′ 50.4552″ N and Long. 74° 8′ 14.652″ E, altitude 31m), Sattari Taluka, Northern Goa district.

The macaque was a medium-sized female with total white haired crown and body whereas forehead, ears, fingers of forelimbs and hindlimbs were faint pinkish (Figure 1). The eyes were reddish in colour. The macaque was tied up with a chain to a tree outside a house (Figure 2). When we enquired with the owner of the house, he told that a monkey keeper found it in forested area of Goa (exact place not known) and left her over here. He comes here regularly to offer food and water. Sometimes the owner also offers food to this albino macaque.

While going through the literature, it was noticed that there were number of records of total albinism in mammals of India, for instance Tiger (Gee 1954), Lesser Rat-tailed Bat (Khajuria, 1973), Chital (Singh 1996), Common Palm Civet and Northern Palm Squirrel (Kumar 2004), Five-striped Palm Squirrel (Anil *et al.*, 2005) and Wild Boar (Neginhal 2005).

Total albinism has been reported in the Toque Macaque, *M. sinica* (Linnaeus) from Sri Lanka (Hill, 1933; Fooden 1979), Rhesus Macaque, *M. mulatta* (Zimmermann) from Pratabgarh (South Rajputana) in captivity (Bahadur 1942) and Bonnet Macaque, *M. radiata* from Trivandrum Zoo, South India in 1936 (Hill 1937; Fooden 1981). Further, a captive male Bonnet Macaque with white fur and skin, but with brown irises was observed in London Zoo by Ogilby in 1836 (Fooden 1981), probably a case of incomplete albinism and a pale golden brown sub-adult female with reduced pigmentation was also reported from U.S. National Museum of Natural History, Washington, D.C. (Fooden 1981). Hence, the present report is the second record of total albinism in Bonnet Macaque after nearly seven decades.

Figure 1. A total white-albino Bonnet Macaque, *Macaca radiata* (Geoffroy) from Goa

Figure 2. The albino macaque tied with a chain to a tree outside a house near Valpoi

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Biodiversity status and conservation strategies with special reference to North-East India by R. Varatharajan*

Book Review by B.A. Daniel

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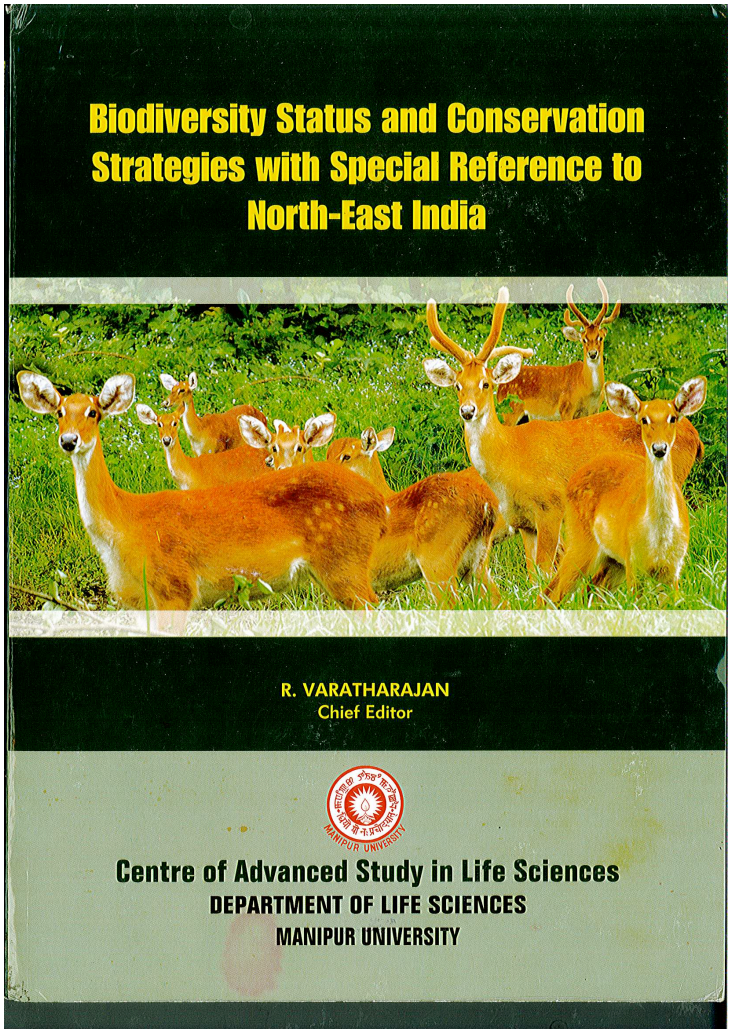
Rs. 1200. (for students Rs. 600).

The proceedings of the symposium on 'Biodiversity Status and Conservation Strategies with Special Reference to North-East India' published in 2012 has addressed several aspects of biodiversity conservation of fauna, flora and ecosystem. This proceedings is the outcome of a symposium that records the occurrence of over 1200 species of plants and animals in North-east India. This publication would be a very useful reference source for researchers, academics and conservation planners.

The proceeding has two sections, 1. Plant and microbial diversity and conservation and 2. Animal diversity and conservation. Including two invited articles, a total of 50 full articles have been included. The invited articles highlight on seaweed biodiversity and conservation contributed by P.V. Subba Rao and an over view of insect biodiversity and climate change by K.G. Sivarakairishnan and C. Selva Kumar.

Articles related to plant diversity of North East India, ethonbotany, traditional knowledge, fungi and ecology are main focus of the section dealing with plant and microbial diversity. Animal diversity includes topics articles related to insect diversity, nematode, rotifers, earthworms and fishes. The volume reveals the richness of this region and airborne fungi, 55 orchids, 52 edible fruits, 50 medicinal plants, 75 each of woody plants, shrubs and herbs, 5 rotifers, 169 nematodes, about 500 insects, and 120 fish species. The authors have enumerated the organisms authentically and focused their status, utility, and conservation strategies wherever possible. Assessment of plant diversity in selected sub tropical forests, National parks, home gardens, and grasslands of North-east India has been highlighted in this publication. Articles related to ethno-botany, cultural aspects and bio-resources like lichens, canes, insects as food, fruits, fishes have been included.

The editor has done a good job in selection of the articles that covers all aspects of biodiversity of North-east India. Some highlighted articles of this volume are: plants associated with tribe of Manipur, diversity of Sisoroid catfishes, and other fishes of North-east India, extensive plant diversity list of Langol Hills and Kangchup Hills, Manipur and many other articles.



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