Bulletin of Environment, Pharmacology and Life Sciences
Bull. Env. Pharmacol. Life Sci., Vol 6[5] April 2017: 99-100

Online ISSN 2277-1808
Journal's URL:http://www.bepls.com
CODEN: BEPLAD
Global Impact Factor 0.876
Universal Impact Factor 0.9804
NAAS Rating 4.95

SHORT COMMUNICATION **OPEN ACCESS**

Tricho-Taxonomy of Himalayan Marmot *Marmota Himalayana* (Hodgson, 1841) (Rodentia: Sciuridae: Mammalia)

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ABSTRACT
The microscopic characters of dorsal guard hairs of Marmota himalayana were examined with the help of optical light microscope for species identification. The microphotographs and characters of dorsal guard hairs are presented here may be used for the species identification.
Keywords: *tricho-taxonomy, dorsal guard hair, morphological and microscopic characters.*

Received 21.01.2017 Revised 11.02.2017 Accepted 04.03.2017

INTRODUCTION
The Himalayan mormot is generally identified with its external morphology *i.e.* characterised by a stout built and shorter tail, having a shorter, harsher and thick fur grizzled buff grey with some black hairs on its dorsal side and the ventral fur is buff, sandy and dark brown coloured; the face is darker brown than the rest of body with a pale buff orbicular ring [3]. In the present study, an attempt has been made to identify the species with the help of its dorsal guard hairs.

METHOD AND METHODS
The dorsal guard hairs were collected from the dry skin of *M. himalayana* available at the Zoological Survey of India, Kolkata. The methodology was followed according to Bruner & Coman [1], Teerink [4], Chakraborty and De [2].

RESULTS AND DISCUSSION
The cuticular characteristics (Fig.1) were as: scale position- 'transversal', scale patterns- 'irregular wave', thestructure of scale margins- 'rippled' and the distance between scale margins- 'near'. The medullary characteristics (Fig. 2 a &b) were as: composition of medulla- 'multicellular in rows', the structure of medulla- 'multiserial ladder', and form of the medulla margins- 'scalloped'. The cross-section (Fig. 3 a&b) was observed as'oblong or biconvex '. There is no detailed microscopic hair characters study available on this species, therefore, this study provides a complete combination of characters of dorsal guard hair of *M. himalayana* for species identification.

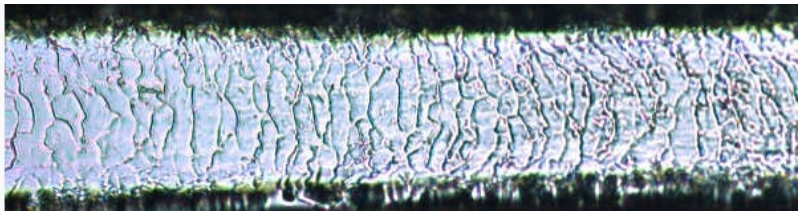
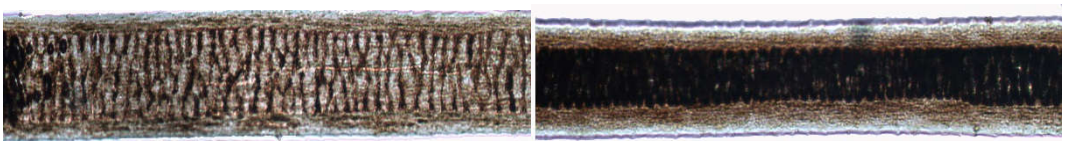


Figure 1. Cuticular characteristics (300X) of *M. himalayana*



a) b)

Figure 2 (a&b). Medullary characteristics (300X) of dorsal guard hair of *M. himalayana*

a) b)

Figure 3 (a&b). Cross-section (300X) of dorsal guard hair of *M. himalayana*

ACKNOWLEDGEMENTS

We sincerely thank Dr.Kailash Chandra, Director, Zoological Survey of India, Kolkata for providing necessary facilities and encouragements.

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CITATION OF THIS ARTICLE

Manokaran Kamalakannan & Joy Krishna De. Tricho-Taxonomy of Himalayan Marmot *Marmota Himalayana* (Hodgson, 1841) (Rodentia: Sciuridae: Mammalia). Bull. Env. Pharmacol. Life Sci., Vol 6[5] April 2017: 99-100