

Contents

Acknowledgements vii

- 1 Introduction** 1
- 2 Hair growth** 2
- 3 Geographic area and species studied** 4

Part I How to identify hairs 5

- 4 Features with importance for identification and terminology** 5
 - 4.1 Hair profile
 - 4.2 Cuticula
 - 4.2.1 *Scale position relative to the longitudinal axis of the hair*
 - 4.2.2 *Cuticular patterns*
 - 4.2.3 *Structure of scale margins*
 - 4.2.4 *Distance between scale margins*
 - 4.3 Cortex
 - 4.4 Medulla
 - 4.4.1 *Composition of the medulla*
 - 4.4.2 *Structures of the medulla*
 - 4.4.3 *Margins of the medulla*
 - 4.5 Cross-sections
- 5 Material and techniques** 12
 - 5.1 Hair type and stage of development
 - 5.2 Preparation of microscopical slides
 - 5.2.1 *Precautions*
 - 5.2.2 *The position of the hair in slides and pictures*
 - 5.2.3 *Hair profile slides*
 - 5.2.4 *Cuticular slides*
 - 5.2.5 *Medullar slides*
 - 5.2.6 *Cross-section slides*
 - 5.3 A visual and metric device for comparison of dimensions in microscopical images and illustrations in this report

Contents

Part II Keys to groups and species 18

6 Introduction and standards of magnification 18

Key 1 Key to groups of animals and to some species with exceptional hairs 19

Key 2 Insectivora: Erinaceidae, Soricidae, and Talpidae 24

Key 3 Chiroptera: Rhinolophidae, and Vespertilionidae 26

Key 4 Lagomorpha: Leporidae 28

Key 5 Rodentia I: Sciuridae 29

Key 6 Rodentia II: Muridae; Cricetinae and Microtinae 30

Key 7 Rodentia III: Muridae; Murinae

Key 8 Rodentia IV: Gliridae

Key 9 Carnivora I: Canidae and Procyonidae

Key 10 Carnivora II: Mustelidae

Key 11 Carnivora III: Felidae

Key 12 Artiodactyla: Suidae, Cervidae, and Bovidae

Part III Atlas 71

7 Introduction 71

8 List of species 218

9 References 223