



CHAPTER IV

DISCUSSION AND CONCLUSION

Hair structures of some species of bat involved in the present work, were studied by Benedict (1957) and Sabnis (1979) by means of whole mount and plastic impression techniques. Their specimens were examined under light microscopes. Possibly because of the limitation of resolution, their results are comparatively different from the present studies, especially on medulla and cuticular scale as follow:

Species	Medulla	Scale characters
<u>Rousettus leschenaulti</u>	absent	corollar spinulate borders (S)
	present	divergent, broad lobate coronal (P)
<u>Taphozous melanopogon</u>	absent	corollar serrate borders (S)
	absent	divergent, dentate coronal (P)
<u>Taphozous theobaldi</u>	absent	corollar serrate borders (S)
	absent	divergent, dentate coronal (P)
<u>Megaderma lyra</u>	absent	serrate (S)
	present	divergent, unequal hastate with pointed peak coronal (P)

Species	Medulla	Scale character
<u>Hipposideros cineraceus</u>	absent	corollar borders (S)
	absent	slightly divergent, unequal hastate coronal (P)
<u>Pipistrellus coromandra</u>	absent	corollar borders (S)
	absent	slightly divergent, unequal hastate coronal (P)
<u>Scotophilus heathi</u>	absent	corollar serrate scale (S)
	absent	apress, unequal hastate coronal (P)
<u>Eonycteris spelaea</u>	absent	divergent, entire coronal (B)
	absent	divergent, broad lobate coronal (P)
<u>Aselliscus stoliczkanus</u>	absent	entire to repand coronal (B)
	absent	unequal hastate coronal (P)
<u>Harpiocephalus harpia</u>	absent	repand to sinuate coronal (B)
	absent	unequal hastate coronal (P)

The common or striking different characters of hair of each group on page indicate that the identification should be reconsidered on the following points.

1. Group 1 : Pteropus has a unique striking difference from the other genera in all aspects.
2. Group 5 : Craseonycteris and Megaderma of Suborder 2 Microchiroptera having medulla, are similar to the common characters of suborder 1 Megachiroptera.
3. Group 7 : Contrary to group 5, Eonycteris of Suborder 1 Megachiroptera lacking of medulla, is the same as the common character of Suborder 2 Microchiroptera.
4. Group 8 and Group 9 : The Emballonuridae and molossidae possessing tooth edge coronal scales, would have some close relationship to each other.

Hair structures are not a primary significance of the diagnostic criterion, but the combination of their structures will be of valuable in using to confirm an identification made on the basis of other morphology. In some cases, the particular appearance of hair structure may be quite characteristic of a certain species and hence, be of great value in identification.