LABORATORY 6: EULIPOTYPHA

Know the taxonomic terms in bold type. For laboratory, be able to identify the key characteristics present in the available specimens. Other characters will be useful to know for lecture.

EULIPOTYPHA

- Eulipotypha ("truly fat and blind") includes the Laurasian families that were previously included in the polyphyletic Insectivora

Characters

1. very small, relatively unspecialized, insectivorous eutherians
2. cheek teeth simple, tritubercular or quadritubercular. [Fig. 11-1]
3. an annular tympanic bone; absence of auditory bullae (Fig 14-8)

CLASSIFICATION

1. Family Talpidae—moles
   a. Distribution: Holarctic, Oriental
   b. forefoot usually broad, paddle-shaped, adapted for digging
   c. humerus blocky
   d. zygomatic arch complete
   e. eyes minute
   f. ears lack pinnae
   g. crowns of upper molars W-shaped (Fig 11.1a)

Note the adaptations for a fossorial life in the skull, skeleton, and skin. Examine the soft, smooth fur. What about it is advantageous for a burrowing mammal? Examine a specimen with little worn teeth. What diet are they adapted for?
2. Family **Soricidae**--shrews
   a. Distribution: Holarctic, Ethiopian, Oriental, Neotropical (to northern Colombia)
   b. I1, large hooked
   c. strongly procumbent lower incisors
   d. no zygomatic arch
   e. crowns of upper molars V-shaped (Fig. 11.1b)

   How do the cusps of the cheek teeth of hedgehogs differ from those of shrews and moles? What does this indicate about the diet of hedgehogs?

4. Family **Solenodontidae**--solenodons
   a. Distribution: Greater Antilles
   b. Note the grooved lower incisor. What is its function?

3. Family **Erinaceidae**--hedgehogs
   a. Distribution: Ethiopian, Palearctic, Oriental
   b. Most with spiny (barbless) pelage, roll into ball for defense
   c. molars rectangular in occlusal outline
   d. molars decreased in size posteriorly.
   e. complete zygomatic arches