

Functional anatomy of the gastrointestinal tract of bats as an evidence for the conservation of three species of microchiropteran bat

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The gastrointestinal tracts of animals adapted to their feeding behaviour. Bats are small flying mammals from the order Chiroptera. Chiropteran bats are predominantly insectivorous in food habit and feed on vast number of night flying insects, making them an important part of the ecological community. Bats provide some control over insect pests in the landscape. The gastrointestinal tract (GI) of insectivorous bats, *Hipposideros ater*, *Hipposideros speoris* and carnivorous bat *Megaderma lyra* were shown modifications related to their food preferences. The histology of GI tractiestomach, small intestine and rectum of these three examined bats showed slight variations in their size, musculature, abundance of mucus secreting glands, Brunnersgland, distribution of villi and Goblet cells. Comparatively noticeable difference was observed in the anatomy of the GI tract of carnivorous bat, *Megaderma lyra* with that of the other two species .The intestine of these bats lack colon, but lower colon, rectum is larger in *M. lyra*,

KEY WORDS

. Gastrointestinal tract (GI), Chiropteran bat, histology, mucus gland, brunners gland, goblet cell and intestine.