

Wagee Khwantongin 2011: Comparative Microanatomy of Digestive System in Lyle's Flying Fox (*Pteropus lylei* Andersen, 1908) and Lesser Large-Footed Bat (*Myotis hasseltii* Temminck, 1840). Master of Science (Zoology), Major Field: Zoology, Department of Zoology. Thesis Advisor: Associate Professor Sompop Navepap, M.S. 81 pages.

The microanatomy of Digestive System in Lyle's Flying Fox Bat (*P. lylei*) and Lesser Large-Footed Bat (*M. hasseltii*) was studied. The eight bats of each species were fixed in neutral buffer formalin for 24 hours before dehydrating specimens with ethanol (70% - 100%) and embedded in paraffin, respectively. Specimens (5 micrometer in thickness) were stained with hematoxylin and eosin and examined under light microscope. It was found that only dorsal surface of *P. lylei*'s tongues covered with keratinized stratified squamous epithelium and had no serous glands in those tongues. Whereas the filliform papillae and fungiform papillae were found on the tongue of both species. In the muscular layer of *P. lylei*'s esophagus were thinner than *M. hasseltii*'s, but not found esophageal gland in the both species. The pylorus of *P. lylei* were long while *M. hasseltii*'s stomach were small and likely found in other Mammals. Every parts of *M. hasseltii*'s intestine were found intestinal gland. Accessory glands in both species were not different.

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Thesis Advisor's signature