

## ABSTRAK

### ANALISIS STRUKTUR HISTOLOGILIDAH DAN SIFAT SEKRESI DARI GLANDULA LIDAH PADA TUPAI JAWA (*Tupaia javanica*) DAN BAJING KELAPA (*Callosciurus notatus*)

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Tupaia jawa (*Tupaia javanica*, Ordo Scandentia) dan bajing kelapa (*Callosciurus notatus*, Ordo Rodentia), merupakan satwa yang memiliki kebiasaan dan pakan berbeda. Jenis pakan yang berbeda diduga mempengaruhi struktur histologi organ pada traktus digesti kedua hewan ini. Penelitian ini bertujuan untuk mengetahui dan mengidentifikasi struktur histologi, posisi, dan sifat sekresi glandula lidah *Tupaia javanica* dan *Callosciurus notatus*. Seekor tupai jawa (*Tupaia javanica*) dan seekor bajing kelapa (*Callosciurus notatus*) dewasa dari wilayah D. I. Yogyakarta digunakan dalam penelitian ini. Identifikasi spesies dilakukan di Laboratorium Sistematika Hewan Fakultas Biologi UGM. Tupai jawa dan bajing kelapa dianestesi menggunakan ketamin dosis 10 mg/kg dan xylazin dosis 2 mg/kg, diperfusi intracardial dengan NaCl fisiologis (0,9%) dilanjutkan *paraformaldehyde* pH 7,4, 0,1 M. Lidah dipreparir dan diambil, direndam dalam *paraformaldehyde* hingga proses pembuatan blok parafin. Blok parafin dipotong menggunakan mikrotom setebal 8  $\mu$ m, diwarnai dengan *Hematoxylin-Eosin*, *Masson's Trichome*, *Alcian Blue*, dan *Periodic Acid Schiff* kemudian diamati menggunakan mikroskop cahaya. Hasil analisis histologi lidah bajing kelapa pewarnaan HE menunjukkan struktur histologi dan jenis papila dari *apex* hingga *radix*, yaitu papila fungiformes, papilla *vallate*, papila *conical*, papila *foliata* pada bajing kelapa, dan papila filiformes yang terdiri dari papila *leaf like*, *wide leaf like*, *bifid*, *saw-like*, dan *conical-like* filiformes pada bajing kelapa dan papila *rosette*, *cornflower*, *scale-like*, dan *small* filiformes. pada tupai jawa. Pewarnaan *Alcian Blue*, dan *Periodic Acid Schiff* ditemukan glandula pada lidah di bagian *radix* terdiri 2 glandula yaitu weber yang bersifat netral dan asam serta glandula *von Ebner* yang bersifat netral. Pewarnaan *Masson's Trichome* menunjukkan kolagen pada bagian *apex*, *corpus* dan *radix* pada lamina *propria mucosae* serta *textus muscularis striatus syncythialis* dengan konsentrasi terbanyak pada bagian *apex*.

**Kata Kunci :** *Tupaia javanica*, *Callosciurus notatus*, lidah, glandula, sekresi

## ABSTRACT

### ANALYSIS OF TONGUE HISTOLOGICAL STRUCTURE AND PROPERTIES OF SECRETION OF LINGUAL GLAND IN HORSFIELD'S TREE SHREW (*Tupaia javanica*) AND PLANTAIN SQUIRRELS (*Callosciurus notatus*)

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Horsfield treeshrew (*Tupaia javanica*, Order Scandentia) and plantain squirrels (*Callosciurus notatus*, Order Rodentia), are animals that have different habits and feed. Different types of feed are thought to affect the histological structure of the organs in the digestive tracts of these two animals. This study aims to determine and identify the histological structure, position, and nature of the secretions of the tongue glands of *Tupaia javanica* and *Callosciurus notatus*. A Horsfield treeshrew (*Tupaia javanica*) and a plantain squirrel (*Callosciurus notatus* adult) from the D.I. Yogyakarta region was used in this study. Species identification was carried out at the Laboratory of Animal Systematics, Faculty of Biology, UGM. Horsfield treeshrew and plantain squirrel were anesthetized using ketamine at a dose of 10 mg/kg and xylazine at a dose of 2 mg/kg, intracardially perfused with physiological NaCl (0.9%) followed by *paraformaldehyde* pH 7.4, 0.1 M. The tongue was prepared and taken, soaked. in *paraformaldehyde* to the process of making paraffin blocks. Paraffin blocks were cut using a microtome with a thickness of 8  $\mu$ m, stained with *Hematoxylin-Eosin*, *Masson's Trichome*, *Alcian Blue*, and *Periodic Acid Schiff*, and then observed using a light microscope. The results of histological analysis of coconut squirrel and Horsfield treeshrew tongue with HE staining showed the histological structure and types of papillae from apex to radix, namely fungiform papillae, vallate, foliate papillae, papillae conical, foliate papillae on plantain squirrels, and filiform papillae consisting of papillae leaf-like, wide leaf-like, bifid, saw-like, and conical-like filiformes in plantain squirrel and papillae rosette, cornflower, scale-like, and small filiformes. on Horsfield treeshrew. Staining *Alcian Blue* and *Periodic Acid Schiff* found glands on the tongue in the section radix consisting of 2 glands, namely *Weber* which is neutral and acidic, and gland *von Ebner* which is neutral. Staining *Masson's Trichome* showed collagen at the apex, corpus, and radix in the lamina propria mucosae and the *textus muscularis striatus syncythialis* with the highest concentration at the apex.

**Keywords:** *Tupaia javanica*, *Callosciurus notatus*, tongue, glands, secretions