

INTISARI

STUDI ANATOMI KULIT MUSANG LUWAK (*Paradoxurus Hermaphroditus*) DENGAN PEWARNAAN ALCIAN BLUE DAN PERIODIC ACID SCHIFF

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Musang Luwak (*Paradoxurus Hermaphroditus*; *Viverridae*) merupakan salah satu fauna endemik Indonesia yang mampu menghasilkan biji kopi unggulan atau dikenal dengan kopi luwak. Musang luwak memiliki ciri fisik khusus yaitu adanya pola garis memanjang pada rambut bagian dorsal yang dominan hitam dan bintik hitam pada bagian lateral yang dominan abu-abu kecokelatan. Penelitian ini bertujuan untuk mengetahui anatomi makroskopik dan mikroskopik kulit normal musang luwak serta distribusi mukopolisakarida dengan pewarnaan *Alcian Blue* (AB) dan *Periodic Acid Schiff* (PAS). Sebanyak tiga ekor musang luwak digunakan dalam penelitian ini. Sampel musang luwak didapat dari penelitian yang telah dilakukan sebelumnya. Sampel diproses dengan metode parafin, kemudian blok dipotong dengan ketebalan 5 μm untuk dijadikan slide. Slide dilakukan pewarnaan hematoxilin eosin, *alcian blue* dan *periodic acid schiff* kemudian diamati dengan mikroskop cahaya yang dilengkapi kamera serta aplikasi *Optilab Viewer*. Data yang diperoleh dianalisis secara deskriptif kualitatif. Kulit musang luwak tersusun atas epidermis, dermis, dan hipodermis. Secara umum morfologi kulit musang luwak sama dengan mamalia lainnya. Hasil pewarnaan AB menunjukkan distribusi mukopolisakarida asam pada jaringan ikat yang ditemukan di stratum basalis epidermis, dermis, dan hipodermis. Hasil pewarnaan PAS menunjukkan distribusi mukopolisakarida netral namun didapatkan hasil negatif pada tiap lapisan kulit.

Kata kunci: *Alcian Blue*, Kulit, Mukopolisakarida, Musang Luwak, *Periodic Acid Schiff*

ABSTRACT

ANATOMICAL STUDY OF COMMON PALM CIVET SKIN (*Paradoxurus Hermaphroditus*) WITH ALCIAN BLUE AND PERIODIC ACID SCHIFF STAINING

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Common palm civet (*Paradoxurus hermaphroditus*; *Viverridae*) is one of the endemic animals in Indonesia that able to produce high quality of coffee bean, therefore known as kopi luwak. The specific physical appearance/characteristic of common palm civet is a long stripe colored in black at the dorsal part of body and black dots at the lateral part with dominant greyish brown color. The purpose of this research is to discover skin anatomy of common palm civet in macroscopic and microscopic view also the distribution of mucopolysaccharides with *Alcian Blue* (AB) and *Periodic Acid Schiff* (PAS) staining. Total of three common palm civet is used in this research. Samples of common palm civet are obtained from previous research. Samples processed with paraffin method, then cut the tissue in 5µm thick section and mount the section onto coated slides. The slides are then use for hematoxylin eosin, alcian blue, and periodic acid schiff staining. Results from the staining are then analyze with light microscope and photo with application *Optilab Viewer*. Data obtained were analyzed descriptively qualitatively. Skin consists of epidermis, dermis, and hipodermis. In general, skin morphology of the common palm civet is same as the other mammals. The results of AB staining show the distribution of acidic mucopolysaccharide in connective tissue found in stratum basale of the epidermis, dermis, and hyppodermis. The results of PAS staining showed a neutral mucopolysaccharide distribution, but negative results were obtained in each layer of the skin

Keywords: *Alcian Blue*, Common Palm Civet, Mucopolysaccharide, *Periodic Acid Schiff*, Skin