

Osteomorfologi Columna Vertebralis dari Musang Luwak (*Paradoxurus hermaphroditus*)

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INTISARI

Musang luwak (*Paradoxurus hermaphroditus*) merupakan keluarga Viverridae dan termasuk ordo Carnivora. Studi osteologi merupakan salah satu cara untuk mengetahui keanekaragaman spesies. Osteomorfologi dapat memberi gambaran dari susunan tulang, terjadinya perubahan evolusi, adaptasi fungsional, serta perkembangan suatu individu secara anatomi. Belum banyak dilakukan penelitian osteomorfologi pada musang luwak. Penelitian ini bertujuan untuk mengetahui osteomorfologi *columna vertebralis* pada musang luwak serta perbandingannya dengan anjing. Penelitian ini menggunakan tiga sampel *columna vertebralis* musang luwak yang telah diperfusi sebelumnya. Bagian leher, punggung, dan ekor direbus sampai mendidih untuk memudahkan preparasi dari kulit, otot, saraf, dan pembuluh darah yang melekat untuk diambil *columna vertebralis*-nya. Untuk memudahkan pencarian titik pengukuran, sampel direndam dalam *Sodium Hipoklorit* 5,25% hingga tulang berwarna keputihan. Sampel kemudian dibilas dengan air mengalir dan dikeringkan di bawah sinar matahari. Identifikasi osteomorfologi dilakukan dengan pengamatan dan pengukuran *columna vertebralis* pada tiap-tiap ruas berdasarkan metode oleh Driesch (1976) dan Olude dkk. (2013). Pengamatan dilakukan untuk mengetahui bentuk dan ciri dari *columna vertebralis* musang luwak dan perbedaannya dengan karnivora lain. Hasil pengukuran *columna vertebralis* setiap hewan disajikan dalam bentuk tabel menggunakan Microsoft Excel 2016. Hasil penelitian menunjukkan formula *columna vertebralis* musang luwak C7 T13 L6-7 S3 Cd21-29 serta ditemukan perbedaan pada *foramen transversarium atlas*, *processus spinosus vertebrae cervicales* pada musang luwak mengarah *caudodorsal*, dan *processus transversus vertebrae lumbales* pada musang luwak lebih lebar dan pipih memiliki ukuran yang semakin ke belakang semakin lebar. Berdasarkan hasil tersebut terdapat perbedaan osteomorfologi dari *columna vertebralis* musang luwak dengan karnivora lain.

Kata Kunci: *Columna Vertebralis*, Karnivora, Osteologi, Osteomorfologi, Musang Luwak

**Osteomorphology of the Vertebral Column of Common Palm Civet
(*Paradoxurus hermaphroditus*)**

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ABSTRACT

Common palm civet (*Paradoxurus hermaphroditus*) belong to the Viverridae family and order Carnivora. Osteology study is one of other ways to understand the diversity of species. Osteomorphology can give an idea about the bone arrangement, evolution, functional adaptation, and anatomical development of an individual. Not much osteomorphological research has been done on common palm civets. This study aims to determine the osteomorphology of the vertebral column in common palm civets and its comparison with other carnivorans. This study used three samples of common palm civets. The neck, back, and tail are boiled to make it easier to clean the attached skin, muscles, nerves, and blood vessels to take the vertebral column. To make it easier to find the measurement point, the samples were immersed in 5.25% Sodium Hypochlorite until the bones were whitened. The samples were then rinsed under running water and dried under the sun. Osteomorphological identification was carried out by observing and measuring the vertebral column in each segment based on the method by Driesch (1976) and Olude *et al.* (2013). Observations were made to determine the characteristic shape of the common palm civet vertebral column and its differences with other carnivorans. The measurement results of the vertebral column of each animal are presented in tabular form using Microsoft Excel 2016. These results showed that the formula for the vertebral column of the common palm civets are C7 T13 L6-7 S3 Cd21-29 and differences were found in the foramen transversarium of the atlas, the spinous process of the cervical vertebrae in common palm civet projecting caudodorsally, and the transverse process of the lumbar vertebrae were thinner and broader and get wider caudally. The conclusion of this research is that there are differences in osteomorphological comparison of common palm civets and other carnivorans.

Key Words: Carnivora, Common Palm Civet, Osteology, Osteomorphology, Vertebrae