

ABSTRAK

PROFIL ULTRASTRUKTUR SISTEM GENITALIA BETINA GARANGAN JAWA (*Urva javanica*) DENGAN METODE SCANNING ELEKTRON MICROSCOPE

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Garangan jawa (*Urva javanica*) merupakan satwa liar asli Indonesia dengan status belum dilindungi. Akan tetapi, informasi mengenai biologi reproduksinya masih sangat terbatas. Penelitian ini bertujuan untuk mempelajari profil anatomi ultrastruktur organ genitalia betina garangan jawa menggunakan metode *Scanning Electron Microscope* (SEM) dan histologi dengan pewarnaan histologi rutin sebagai pendukung hasil pencitraan SEM. Tiga ekor garangan betina digunakan dalam penelitian ini. Organ reproduksi garangan betina dikoleksi dan difiksasi dalam campuran larutan glutaraldehyde 2,5% dan paraformaldehyde 2% untuk pengamatan SEM. Data yang diperoleh dianalisis secara deskriptif untuk menggambarkan struktur organ genitalia betina garangan jawa. Hasil penelitian menunjukkan ovarium garangan jawa berbentuk oval di dalam bursa ovarii, dilapisi oleh epitelium germinalis dengan batas sel berbentuk pola paving (*paving stones pattern*), serta didukung oleh jaringan adiposa pada bursa ovarii, dengan bagian korteks mengandung stroma dan folikel primordial hingga atresia. Oviduk pada garangan jawa tampak berliku dengan ukuran <1 cm dan permukaan mukosa dilapisi oleh sel bersilia dan tidak bersilia. Uterus pada garangan jawa termasuk ke dalam tipe bikornue dengan lapisan permukaan endometrium dilengkapi struktur mikrovili, muara kelenjar endometrium berbentuk pori, serta ditemukan struktur menyerupai *secretory blebs* dan pinopoda. Serviks pada garangan jawa tampak berkonsistensi keras dengan mukosa serviks tertutupi oleh mikrovili yang padat. Vagina sebagai saluran kopulasi memiliki karakteristik permukaan epitel pipih berlapis dengan susunan sel poligonal menyerupai pola sirap.

Kata kunci : anatomi; garangan jawa; sistem genitalia betina; *scanning electron microscope*

ABSTRACT

ULTRASTRUCTURAL PROFILE OF THE FEMALE GENITAL SYSTEM JAVAN MONGOOSE USING SCANNING ELECTRON MICROSCOPY

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Javan mongoose is a wild animal native to Indonesia with an unprotected conservation status. However, information regarding its reproductive biology is still very limited. This study aimed to investigate the ultrastructural anatomical profile of the female genital organs of the Javan mongoose using Scanning Electron Microscopy (SEM) and histology with routine histological staining as supporting methods for SEM imaging. Three female Javan mongooses were used in this study. The reproductive organs were collected and fixed in a mixture of 2.5% glutaraldehyde and 2% paraformaldehyde for SEM observation. The obtained data were analyzed descriptively to describe the structure of the female genital organs of the Javan mongoose. The results showed that the ovaries of the Javan mongoose were oval-shaped within the bursa ovarii, covered by germinal epithelium with cell boundaries forming a paving pattern (paving stones pattern), and supported by adipose tissue within the bursa ovarii, while the cortex contained stroma and follicles ranging from primordial to atretic follicles. The oviduct appeared convoluted with a size of <1 cm, and its mucosal surface was lined by ciliated and non-ciliated cells. The uterus of the Javan mongoose was classified as bikornuate, with the endometrial surface containing microvilli structures, pore-like openings of endometrial glands, and structures resembling secretory blebs and pinopodes. The cervix appeared firm in consistency, with the cervical mucosa covered by dense microvilli. The vagina, as the copulatory organ, exhibited a stratified squamous epithelial surface with polygonal cells arranged in a pattern resembling roof shingles.

Kata kunci : *anatomy; javan mongoose; female genital system; scanning electron microscope*