

PROFIL PANJANG SIKLUS ESTRUS PADA GENERASI KEDUA (G2) DAN KEEMPAT (G4) KUDA PERANAKAN *THOROUGHBRED* BERDASARKAN PERUBAHAN SITOLOGI VAGINA DAN KEASAMAN VAGINA

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INTISARI

Penelitian ini bertujuan untuk mengetahui profil panjang siklus estrus pada generasi kedua (G2) dan generasi keempat (G4) kuda *Thoroughbred* berdasarkan perubahan sitologi vagina dan keasaman vagina (pH). Penelitian ini menggunakan tiga ekor kuda generasi kedua (G2) dan tiga ekor kuda generasi keempat (G4). Kuda tersebut diambil jaringan sel *epithel* vaginanya selama 63 hari dan dilakukan pengecatan menggunakan *Giemsa*. Data tanda-tanda visual estrus dianalisis secara deskriptif, morfologi sel *epithel* dinding vagina dianalisis secara kuantitatif. Data keasaman vagina dan panjang siklus estrus dianalisis statistik menggunakan *Independent Sample T-test*. Hasil pengamatan menunjukkan terdapat perubahan bentuk sel *epithel* vagina pada siklus estrus yang terdiri dari sel parabasal yang mendominasi pada fase diestrus hingga 80%, sel intermediet yang mendominasi pada fase proestrus, dan sel superfisial yang mendominasi hingga 90% pada fase estrus. Kesimpulan dari penelitian diperoleh panjang siklus estrus pada kuda generasi kedua (G2) dan generasi keempat masing masing adalah sebesar $19,55 \pm 0,84$ hari dan $17,55 \pm 2,14$ hari. Keasaman vagina pada kuda generasi kedua (G2) adalah $8,85 \pm 0,12$ dan generasi keempat (G4) sebesar $8,87 \pm 0,32$. Tanda-tanda estrus pada kuda generasi keempat lebih terlihat (60%) daripada kuda generasi kedua tanda (40%).

(Kata kunci: Sel epitel, *Vaginal smear*, Kuda G2, Kuda G4, pH)

**PROFILE OF ESTROUS CYCLE LENGTH ON THE SECOND (G2) AND
FOURTH GENERATION (G4) OF THOROUGHBRED CROSSBREED
MARE BASED ON VAGINAL CYTOLOGY
AND ACIDITY OF VAGINA**

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ABSTRACT

The aim of this research was to determine profile of estrous cycle length on second and fourth generation of Thoroughbred crossbreed mare based on vaginal cytology and vaginal acidity changes. Three heads of second generation mare (G2) and three heads of fourth generation mare (G4) were used in this research. Vaginal epithel cells of mare were collected in 63 days and stained with Giemsa. The data of vaginal epithelial and vaginal acidity were collected and checked with estrous behavior of mare. Visual estrous symptom was analized descriptively, morphology of epithelial cells were analyzed quantitatively. Data of acidity vagina and length of estrous cycle were analized by Independent Sample T-test. The result showed that the changes of vaginal epithelial at the phases of estrous cycle i.e parabacal cells were dominated on diestrous phase (80%), intermediate cells were dominated on proestrous, however superficial cells were dominated on estrous (90%). It could be conclude that length of estrous cycle on second and fourth generation were 19.55 ± 0.84 and 17.55 ± 2.14 days, respectively. The vaginal acidity of second generation were 8.85 ± 0.12 and and fourth generation were 8.87 ± 0.12 . Visual estrous symptom were clearer on fourth generation (60%) than second generation (40%).

(Keywords: epithel cell, vaginal smear, G2 mare, G4 mare, acidity of vagina)