

ABSTRAK

PROFIL MINERAL KALSIUM (Ca), FOSFAT ANORGANIK (P), DAN MAGNESIUM (Mg) DARAH PADA KUDA YANG MENGALAMI KEGAGALAN KEBUNTINGAN DI DESA GULON, KECAMATAN SALAM, KABUPATEN MAGELANG

Suci Fatmawati

14/367843/KH/8198

Populasi kuda di Indonesia jika dilihat dari produktivitas dan reproduktivitasnya adalah rendah. Gangguan fisiologis dan deteksi yang tidak tepat menyebabkan rendahnya efisiensi reproduksi sehingga meningkatkan kejadian kegagalan kebuntingan. Kegagalan kebuntingan menurut sebuah penelitian dapat memberikan gambaran mineral darah Ca, P, Mg yang berbeda. Tujuan penelitian ini adalah mengetahui profil mineral Ca, P, dan Mg darah kuda yang mengalami kegagalan kebuntingan di Desa Gulon, Kecamatan Salam, Kabupaten Magelang secara deskriptif.

Penelitian dilakukan dengan *recording* riwayat gagal bunting pada kuda. Empat ekor kuda diambil sampel darah dan *vaginal smear*-nya selama satu siklus estrus. Analisis kadar mineral Ca, P, dan Mg darah dilakukan di Parahita *Diagnostic Center* menggunakan *Sysmex XT-2000i*. Pengamatan *vaginal smear* dilaksanakan di Laboratorium Reproduksi dan Obstetri FKH UGM menggunakan mikroskop perbesaran 4x10. Data mineral dianalisis dengan uji statistik deskriptif dan sel *vaginal smear* dengan uji analisis *two way ANOVA*.

Hasil kadar mineral Ca, P, Mg darah kuda yang mengalami kegagalan kebuntingan adalah $11,42 \pm 0,51$ mg/dl, $3,19 \pm 0,61$ mg/dl, dan $2,14 \pm 0,37$ mg/dl. Pengamatan *vaginal smear* menunjukkan bahwa pengambilan sampel dimulai dari fase estrus, metestrus, diestrus dan proestrus. Sel epitel yang teramati berdasarkan dominasi sel secara berturut-turut adalah sel superfisial, sel intermediet kecil, sel parabasal dan sel intermediet kecil.

Kata kunci: kuda, kalsium darah, fosfat anorganik darah, magnesium darah, *vaginal smear*

ABSTRACT

BLOOD MINERAL PROFILE OF CALSIUM (Ca), INORGANIC PHOSPHATE (P), AND MAGNESIUM (Mg) ON PREGNANCY FAILURE HORSES IN GULON VILLAGE, SALAM, MAGELANG

Suci Fatmawati

14/367843/KH/8198

Productivity and reproductivity of horse in Indonesia is considerably low. This is mainly due to physiological disorder and inaccurate detection, thus increasing the incidence of pregnancy failure. According to a study pregnancy failure may provide a different blood mineral profile of Ca, P, Mg. The purpose of this research is to find out the Ca, P, and Mg mineral profile in failed pregnation horses in Gulon Village, Salam District, Magelang Regency through descriptive manner.

The study was conducted by recording the history of failed pregnation on horses. Blood and vaginal smear sample was taken from four horses during one estrus cycle. Analysis of Ca, P, and Mg level contained in blood was performed at Parahita Diagnostic Center using Sysmex XT-2000i. Meanwhile, vaginal smear observation was conducted at the Laboratory of Reproduction and Obstetrics FKH UGM using microscope with 4x10 magnification. Descriptive statistic test was used to analyse mineral data, on the other hand two-way ANOVA test was used to analyse vaginal smear cell.

The results of Ca, P, Mg blood mineral level in pregnancy failure horses are 11,42±0,51 mg/dl, 3,19±0,61 mg/dl, and 2,14±0,37 mg/dl. Vaginal smear observation showed that sampling start from the phases of estrus, metestrus, diestrus and proestrus. The epithelial cells observed on the basis of cell dominance are superficial cells, small intermediate cells, parabasal cells and small intermediate cells.

Keywords: horse, blood calsium, blood inorganic phosphate, blood magnesium, vaginal smear