

INTISARI

KADAR PROGESTERON PADA SUSU MENGGUNAKAN METODE *ENZYME-LINKED IMMUNOSORBENT ASSAY (ELISA)*

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Keberhasilan reproduksi sapi saat ini tidak sebanding dengan kebutuhan akan permintaan konsumen. Hormon reproduksi merupakan salah satu yang bertanggung jawab dalam menentukan produktivitas ternak. Hormon progesteron mempunyai peranan penting untuk menentukan keadaan ternak tersebut dalam keadaan normal, estrus, bunting ataupun tidak bunting. Uji progesteron menggunakan susu lebih dianjurkan daripada darah karena pengambilan sampel susu lebih mudah diambil bersamaan dengan waktu pemerahan, sehingga tidak berpotensi menimbulkan stress pada ternaknya. Dalam penelitian ini sampel susu berasal dari sapi FH, laktasi, umur dua tahun, IB pertama 26 November 2020 yang dipelihara di Fakultas Kedokteran Hewan Universitas Gadjah Mada Yogyakarta. Semua sampel disentrifugasi, lemak yang ada dipermukaan diambil dan diukur kadar progesteron menggunakan ELISA dengan analisis statistik Independent Sampel Test (T-Test) terbaca Sig. (2-tailed) >0,05. Rata-rata konsentrasi progesteron susu pagi hari 22.34 ± 67.32 ng/ml dan sore hari 40.32 ± 98.06 ng/ml. Berdasarkan hasil analisis statistik tidak terdapat perbedaan kadar progesteron yang signifikan antara susu yang diperah pagi dan sore hari. Hal ini menunjukkan bahwa dalam pengambilan sampel untuk mengukur kadar hormon progesteron dapat menggunakan sampel susu pagi maupun sore hari.

Kata kunci: Progesteron, Sapi Perah FH, Sampel Susu, ELISA

ABSTRACT

PROGESTERONE LEVELS IN MILK USING *ENZYME-LINKED* *IMMUNOSORBENT ASSAY (ELISA) METHOD*

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The success of reproduction cattle at this time is not commensurate with the needs of consumer demand. Reproductive hormone is one that is responsible for determining livestock productivity. The hormone progesterone has an important role in determining the state of the animal in normal, estrus, pregnant or not pregnant. Progesterone testing using milk is preferable to blood because milk sampling is easier to take at the same time as milking, so it does not have the potential to cause stress to the livestock. In this study, milk samples came from Holstein Friesian Dairy Cattle, lactating, two years old, first IB on November 26, 2020, at the Faculty of Veterinary Medicine, Gadjah Mada University, Yogyakarta. All samples were centrifuged, the fat on the surface was taken and progesterone levels were measured using ELISA with statistical analysis of the Independent Sample Test (T-Test) which read Sig. (2-tailed) >0.05. The average concentration of progesterone in milk in the morning was 22.34 ± 67.32 ng/ml and in the evening was 40.32 ± 98.06 ng/ml. Based on the results of statistical analysis there was no significant difference between the results of progesterone in morning and evening milk. This shows that in taking samples to measure levels of the hormone progesterone, we can use morning and evening milk samples.

Key words: Progesterone, FH Dairy Cows, Milk Sample, ELISA