

## INTISARI

### **PENGUKURAN KADAR HORMON PROGESTERON PADA FESES SAPI PERAH BUNTING PAGI DAN SORE**

**Rosalia Greta Dwi Jayanti**

**18/424016/KH/09641**

Hormon progesteron merupakan hormon yang memiliki peranan penting selama kebuntingan sehingga kadarnya dijaga tetap konstan selama masa kebuntingan. Analisis kadar hormon progesteron dapat dilakukan dengan menggunakan sampel feses. Waktu hewan defekasi adalah pagi dan sore yaitu saat sapi dilakukan pemerahan dan ketika sapi menyusui. Penelitian ini bertujuan untuk mengetahui kadar hormon progesteron pada feses sapi perah Friesian Holstein (FH) bunting yang diambil pada pagi dan sore hari sehingga dapat diketahui pengaruh waktu pengambilan sampel terhadap kadar hormon progesteron. Penelitian ini menggunakan sampel feses yang diperoleh dari sapi perah FH bunting, umur 2 tahun, yang dipelihara di UP2KH FKH UGM. Pengambilan sampel dilakukan selama 9 hari pada pagi dan sore hari. Sampel feses yang diperoleh dikeringbekukan selama 72 jam dalam suhu  $-80^{\circ}\text{C}$ , selanjutnya diesktraksi menggunakan methanol 80%. kadar progesteron diukur menggunakan kit ELISA komersial. Hasil pengukuran kadar progesteron pada pagi hari adalah 31,62 ng/gr feses kering sampai 858,22 ng/gr feses kering dengan rerata  $163 \pm 270,34$  ng/gr feses kering sedangkan pada sore kadar progesteron padarentang 22,74 sampai 1313,43 dengan rerata  $369,8 \pm 519,88$  ng/gr feses kering. Hasil analisis statistik menunjukkan tidak ada perbedaan kadar progesteron pada sampel feses yang dikoleksi pagi dan sore hari. Berdasarkan hasil penelitian dapat disimpulkan bahwa waktu pengambilan sampel tidak berpengaruh terhadap kadar progesteron feses sapi FH bunting.

**Kata kunci:** feses, progesteron, sapi FH bunting, waktu pengambilan sampel.

## ABSTRACT

### MEASUREMENT OF MORNING AND EVENING FECAL PROGESTERONE IN PREGNANT DAIRY CATTLE

**Rosalia Greta Dwi Jayanti**

**18/424016/KH/09641**

Progesterone is a hormone that have an important role during pregnancy so that its levels are kept constant during pregnancy. Analysis of progesterone hormone levels can be done by using a fecal sample. The time for defecation is in the morning and evening when the cow is milking and breastfeeding. This study aims to determine the level of the hormone progesterone in the feces of pregnant Friesian Holstein (FH) dairy cows taken in the morning and evening so that it can be seen whether the time of sampling affects the levels of the hormone progesterone obtained. This study used faecal samples obtained from pregnant FH dairy cows, aged 2 years, which were kept at UP2KH FKH UGM. Sampling was carried out for 9 days in the morning and evening. The faecal samples obtained were freeze-dried for 72 hours at  $-80^{\circ}\text{C}$ , then extracted using 80% methanol. Progesterone levels were measured using a commercial ELISA kit. The results of the measurement of the average progesterone levels in the morning were 31.62 to 858.22 with an average of 163 ng/gr of dry feces, while the progesterone levels were in the range of 22.74 to 1313.43 with an average of 369.8 ng/gr g dry feces. The results of the analysis showed that there was no difference in progesterone levels in the stool samples collected in the morning and evening. Based on the results of the study, it can be seen that the level of sampling time has no effect on the progesterone levels of pregnant FH cows feces.

**Keywords:** feces, progesterone, pregnant FH cows, sampling time.