

**IDENTIFIKASI KINERJA REPRODUKSI SAPI PERAH *FRIESIAN*
HOLSTEIN BERDASARKAN BIOKIMIA DARAH DI BALAI
BESAR PEMBIBITAN TERNAK UNGGUL DAN HIJAUAN
PAKAN TERNAK BATURRADEN**

Afan Fauzan Pratama
13/346194/PT/06430

INTISARI

Penelitian ini bertujuan untuk mengetahui kinerja reproduksi sapi perah *Friesian Holstein* berdasarkan biokimia darah. Materi penelitian yang digunakan adalah sampel darah dari 22 ekor sapi FH berumur 3 sampai 5 tahun dalam kondisi laktasi, dipelihara di Balai Besar Pembibitan Ternak Unggul dan Hijauan Pakan Ternak (BBPTU-HPT) Baturraden. Sampel darah diambil melalui *vena caudalis* pada pagi hari sebelum pemberian pakan, pengambilan darah dilakukan tiap dua kali dalam satu minggu, dilakukan pengulangan sebanyak empat kali. Sampel darah dianalisis kadar glukosa, kolesterol, total protein, dan *blood urea nitrogen* (BUN). Data biokimia darah dikorelasikan dengan kinerja reproduksi, yaitu *post partum mating* (PPM) dan *service per conception* (S/C) yang didapatkan dari hasil pencatatan. Data yang diperoleh kemudian dianalisis menggunakan korelasi model *pearson correlation*. Hasil penelitian menunjukkan bahwa koefisien korelasi kadar glukosa, kolesterol, total protein dan BUN terhadap PPM berturut-turut yaitu 0,039, -0,253, 0,445 dan -0,073. Koefisien korelasi kadar glukosa, kolesterol, total protein, dan BUN terhadap S/C yaitu -0,008, -0,229, 0,456 dan -0,037. Kesimpulan dari penelitian ini, total protein memiliki tingkat korelasi positif cukup kuat terhadap PPM. Total protein memiliki tingkat korelasi positif cukup kuat terhadap S/C.

(Kata kunci: Sapi *Friesian Holstein*, biokimia darah, kinerja reproduksi)

IDENTIFICATION REPRODUCTIVE PERFORMANCE OF DAIRY COWS *FRIESIAN HOLSTEIN* BASED ON BLOOD BIOCHEMISTRY IN BBPTU-HPT BATURRADEN

Afan Fauzan Pratama
13/346194/PT/06430

ABSTRACT

This research was carried out to identify reproductive performance of dairy cows *Friesian Holstein* based on blood biochemistry. The blood samples were collected from 22 lactating cows 3 to 5 years of age, through the caudalis vein before morning feeding in BBPTU-HPT Baturraden. The blood were collected twice a week, repeated four times. The blood samples were analysis for plasma glucose, cholesterol, protein and *blood urea nitrogen* (BUN). Then, the data of blood biochemistry are correlated with reproductive performance, post partum mating (PPM) and service per conception (S/C), obtained from the recording. The data were analyzed using correlation model pearson correlation. The result showed that the correlation coefficient of glucose, cholesterol, total protein and BUN to PPM were 0.039, -0.253, 0.445 and -0.073, respectively. The correlation coefficient of glucose, cholesterol, total protein and BUN to service per conception were -0.008, -0.229, 0.456 and -0.037, respectively. Based on the results of research it can be concluded that was positively and rate strong enough correlation between total protein level and PPM. Total protein has a positive correlation and rate strong enough to S/C.

(Keywords: *Friesian Holstein* cows, blood biochemistry, reproductive performance)