PROFIL BIOKIMIA DARAH PADA KAMBING SAPERA PRIMIPARA DAN MULTIPARA

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INTISARI

Penelitian ini bertujuan untuk mengetahui perbedaan profil biokimia darah pada kambing Sapera primipara dan multipara. Profil biokimia darah dapat digunakan untuk mengukur status kesehatan ternak serta indikator aktivitas metabolisme ternak laktasi untuk mencegah penurunan produktivitas dan fungsi reproduksi. Penelitian ini menggunakan 10 ekor induk kambing Sapera yang sedang dalam periode laktasi dan tidak bunting. Induk kambing dikelompokkan menjadi dua kelompok berdasarkan paritas yaitu 5 ekor induk kambing primipara dan 5 ekor induk kambing multipara. Kambing Sapera diberi pakan berupa konsentrat sebanyak 1 kg/ ekor/ hari dan sumber serat berupa kangkung kering (*Ipomoea reptans*) sebanyak 1 kg/ ekor/ hari. Pemberian air minum dilakukan secara *ad libitum*. Profil biokimia darah yang dapat diamati antara lain glukosa, *blood urea nitrogen* (BUN), dan protein. Konsentrasi glukosa dianalisis dengan metode (GOD-PAP). Konsentrasi *blood urea nitrogen* (BUN) dianalisis dengan metode *urease-GLDH.* Konsentrasi protein dianalisis dengan metode *biored*. Penelitian dilakukan menggunakan serum darah sebagai sampel. Data yang diperoleh kemudian dianalisis dengan metode analisis *Independent Sample T-Test* menggunakan *software Statistic Package for the Social Sciences* (SPSS) versi 25.0 untuk mengetahui adanya perbedaan profil biokimia darah pada induk kambing Sapera primipara dan multipara. Hasil penelitian menunjukkan bahwa rata-rata konsentrasi glukosa, *blood urea nitrogen* (BUN), dan total protein pada induk kambing Sapera primipara secara berturut-turut yaitu 62,27±6,69 mg/dL, 23,02±6,47 mg/dL, dan 6,52±2,05 mg/dL sedangkan rata-rata konsentrasi glukosa, *blood urea nitrogen* (BUN), dan total protein pada induk kambing Sapera multipara secara berturut-turut yaitu 57,39±7,53 mg/dL, 18,02±6,94 mg/dL, dan 6,45±2,51 mg/dL. Hasil analisis statistik menunjukkan kadar glukosa darah dan kadar BUN pada induk kambing Sapera primipara dan multipara berbeda nyata ($P<0,05$), sedangkan kadar total protein tidak berbeda nyata ($P>0,05$). Berdasarkan hasil penelitian dapat disimpulkan bahwa kadar glukosa darah dan *blood urea nitrogen* (BUN) pada induk kambing Sapera primipara lebih tinggi dibandingkan induk kambing Sapera multipara, sedangkan kadar total protein darah tidak berbeda.

(Kata kunci: Kambing Sapera, Primipara, Multipara, Profil Biokimia Darah, *Blood Urea Nitrogen*, Total Protein, Glukosa)

BLOOD BIOCHEMICAL PROFILE IN PRIMIPAROUS AND MULTIPAROUS SAPERA GOATS

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ABSTRACT

This study aims to determine the differences in blood biochemical profiles in primiparous and multiparous Sapera does. Blood biochemical profiles can be used to measure the health status of animal as well as indicators of metabolic activity of lactating doe to prevent a decrease in productivity and reproductive function. This study used 10 Sapera does that were in the lactation period and were not pregnant. Does were grouped into two groups based on parity, namely 5 primiparous does and 5 multiparous does. Sapera does were given feed in the form of concentrate as much as 1 kg/head/day and fiber source in the form of water spinach straw (*Ipomoea reptans*) as much as 1 kg/head/day. The drinking water was provided ad libitum. The blood biochemical profiles that can be observed include glucose, blood urea nitrogen (BUN), and protein. The glucose concentration was analyzed by GOD-PAP method. The blood urea nitrogen (BUN) concentration was analyzed by the urease-GLDH method. The total protein concentration was analyzed by the biored method. The study was conducted using blood serum as a sample. The data obtained were then analyzed using the Independent Sample T-Test analysis method using the Statistical Package for the Social Sciences (SPSS) version 25.0 software to determine the differences in blood biochemical profiles in primiparous and multiparous Sapera does. The results showed that the average concentration of glucose, blood urea nitrogen (BUN), and total protein in the Sapera primipara does respectively were 62.27±6.69 mg/dL, 23.02±6.47 mg/dL, dan 6.52±2.05 mg/dL while the average concentration of glucose, blood urea nitrogen (BUN), and total protein in the Sapera multipara does respectively were 57.39±7.53 mg/dL, 18.02±6.94 mg/dL, dan 6.45±2.51 mg/dL. The results of statistical analysis showed that blood glucose levels and BUN levels in primipara and multiparous Sapera does were significantly different ($P<0.05$), while total protein levels were not significantly different ($P>0.05$). Based on the results of the study, it can be concluded that blood glucose and blood urea nitrogen (BUN) levels in Sapera primipara does were higher than in Sapera multipara does, while the total blood protein levels were not differ.

(Keywords: Sapera Goat, Primiparous, Multiparous, Blood Biochemical Profile, Blood Urea Nitrogen, Total Protein, Glucose)