

## ABSTRAK

### **PENGARUH *SEX* DAN UMUR TERHADAP KADAR PROTEIN PLASMA TOTAL PADA ANAK KAMBING BLIGON USIA 2 SAMPAI 8 MINGGU**

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Penelitian ini ditujukan untuk mengkaji pengaruh *sex* dan umur terhadap kadar protein plasma total pada anak kambing Bligon usia 2 sampai 8 minggu. Sepuluh ekor cempe (5 jantan dan 5 betina) yang dipelihara dari lahir sampai umur 2 bulan bersama induk masing-masing. Dilakukan pengukuran kadar protein plasma total secara periodik setiap 2 minggu sekali sampai umur 8 minggu. Pengukuran kadar protein plasma total dilakukan dengan menggunakan alat refraktometer. Data protein plasma total yang diperoleh dianalisis dengan menggunakan uji *repeated measures* ANOVA untuk mengetahui pengaruh umur dan uji ANOVA pola faktorial untuk mengetahui pengaruh *sex* pada aplikasi Statistics SPSS<sup>®</sup> 16.0. Hasil uji ANOVA pola faktorial menunjukkan bahwa *sex* tidak berpengaruh secara signifikan terhadap kadar protein plasma total pada anak kambing usia 2 sampai 8 minggu dimana ( $P > 0,05$ ). Hasil analisis statistik pada uji *repeated measures* ANOVA menunjukkan adanya pengaruh umur yang signifikan terhadap kadar protein plasma total anak kambing usia 2 sampai 8 minggu ( $P < 0,05$ ). Pada usia 2 dan 4 minggu kadar protein plasma total berada pada level yang tidak berbeda signifikan, yakni  $5,78 \pm 0,46$  g/dL dan  $5,97 \pm 0,28$  g/dL ( $P > 0,05$ ) dan pada usia 6 dan 8 minggu meningkat signifikan menjadi  $6,26 \pm 0,32$  g/dL dan  $6,48 \pm 0,52$  g/dL ( $P < 0,05$ ). Tidak ditemukan adanya perbedaan signifikan pada rerata protein plasma total pada usia 6 dan 8 minggu ( $P > 0,05$ ). Disimpulkan bahwa kadar protein plasma total pada anak kambing Bligon usia 2 sampai 8 minggu dipengaruhi oleh umur, namun tidak dipengaruhi oleh faktor *sex*.

**Kata kunci:** jenis kelamin, kambing Bligon, protein plasma total.

## **ABSTRACT**

### **THE EFFECT OF SEX AND AGE ON TOTAL PLASMA PROTEIN LEVELS OF BLIGON GOAT KIDS AGE 2 TO 8 WEEKS**

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This study aimed to evaluate the effect of sex and age on total plasma protein levels in Bligon goats aged 2 to 8 weeks. Ten goat kids (5 males and 5 females) were reared from birth to 2 months of age with their respective mothers. Measurements of total plasma protein levels were carried out periodically every 2 weeks until 8 weeks of age. Measurement of total plasma protein levels was carried out using a refractometer. Data obtained were analyzed using repeated measures ANOVA to determine the effect of age and factorial pattern ANOVA to determine the effect of sex on total plasma protein concentration by using the SPSS<sup>®</sup> 16.0 Statistics application. The results showed that sex had no significant effect on plasma total protein levels in goats aged 2 to 8 weeks ( $P > 0.05$ ). There was a significant effect of age on total plasma protein levels of goats aged 2 to 8 weeks ( $P < 0.05$ ). At 2 and 4 weeks of age, total plasma protein levels were at levels that were not significantly different, namely  $5.78 \pm 0.46$  g/dL and  $5.97 \pm 0.28$  g/dL ( $P > 0.05$ ) and at the age of 6 and 8 weeks increased significantly to  $6.26 \pm 0.32$  g/dL and  $6.48 \pm 0.52$  g/dL ( $P < 0.05$ ). No significant difference in the total plasma protein was found at 6 and 8 weeks of age ( $P > 0.05$ ). It was concluded that the total plasma protein level in Bligon goats aged 2 to 8 weeks was influenced by age, but not by sex.

**Key words:** age, Bligon goat kid, sex, total plasma protein.