

ABSTRAK

RASIO NEUTROFIL DENGAN LIMFOSIT (N/L) KAMBING JANTAN DAN BETINA SEBAGAI BIOMARKER STRES SELAMA PENERAPAN ANIMAL-ASSISTED THERAPY DI YAYASAN AINUL YAKIN SPECIAL CHILDREN GUNUNGKIDUL YOGYAKARTA

Briliani Sekar Utami

22/503669/KH/11347

Rasio neutrofil dengan limfosit (N/L) dapat digunakan sebagai *biomarker* stres. Penelitian ini bertujuan untuk mengetahui tingkat stres pada kambing jantan dan betina melalui rasio neutrofil dengan limfosit (N/L). Sampel darah diambil dari 7 ekor kambing jantan dan 12 ekor betina. Sampel darah diambil melalui vena jugularis kemudian dianalisis menggunakan mesin Vet Hematology Analyser 5 Dif untuk dilihat hasil hematologi meliputi nilai neutrofil dan limfosit. Rasio N/L dihasilkan dengan membandingkan nilai neutrofil dengan limfosit. Hasil perhitungan rata-rata rasio N/L kambing jantan adalah $1,09 \pm 0,25$ dan kambing betina $1,43 \pm 0,68$. Analisis statistik menggunakan metode *Independent Sample T-Test* menunjukkan tidak terdapat perbedaan yang signifikan antara rasio N/L pada domba jantan dan betina ($p > 0,05$). Dapat disimpulkan bahwa kegiatan *Animal-Assisted Therapy* (AAT) tidak menyebabkan kambing mengalami stres berdasarkan rasio neutrofil dengan limfosit (N/L).

Kata Kunci: *Animal-Assisted therapy*, Kambing, Rasio N/L, Stres

ABSTRACT

NEUTROPHIL-TO-LYMPHOCYTE RATIO (N/L) IN MALE AND FEMALE GOATS AS A STRESS BIOMARKER DURING THE IMPLEMENTATION OF ANIMAL-ASSISTED THERAPY AT YAYASAN AINUL YAKIN SPECIAL CHILDREN GUNUNGKIDUL YOGYAKARTA

Briliani Sekar Utami

22/503669/KH/11347

The neutrophil-to-lymphocyte ratio (N/L) can be used as a biomarker of stress. This study aimed to determine the stress levels in male and female goats based on the neutrophil-to-lymphocyte ratio (N/L). Blood samples were collected from 7 male goats and 12 female goats. The samples were obtained via the jugular vein and subsequently analyzed using a Vet Hematology Analyzer 5 Diff to assess hematological parameters, including neutrophil and lymphocyte counts. The N/L ratio was calculated by comparing the neutrophil count to the lymphocyte count. The results showed that the mean N/L ratio was $1,09 \pm 0,25$ in male goats and 1.43 ± 0.68 in female goats. Statistical analysis using the Independent Sample T-Test indicated that there was no significant difference in the N/L ratio between male and female goats ($p > 0.05$). It can be concluded that Animal-Assisted Therapy (AAT) did not induce stress in goats, as indicated by the neutrophil-to-lymphocyte (N/L) ratio.

Keywords: Animal-Assisted therapy, Goat, Ratio N/L, Stress