

Haematological Alterations in Anemic Bali Cattle Raised in Semi-Intensive Husbandry System

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Abstract : Most farmers in Bangkinang Seberang sub district raise Bali cattle in semi-intensive husbandry system. The farmers believe that raising such a way is economical and quite effective. The farmers do not need to provide forage and plant feed crops. Furthermore, the raising method is considered not to interfere with the main job. Screening for anemia in Bali cattle of Bangkinang Seberang subdistrict, Kampar regency, Riau, Indonesia, had been conducted. The aim of the study was to analyze hematological alterations in the anemic Bali cattle. A number of 75 Bali cattle were screened for anemia on the basis of Hemoglobin (Hb) concentration. The other hematological parameters that were measured including packed cell volume (PCV), total erythrocyte count (TEC), mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH) and mean corpuscular hemoglobin concentration (MCHC). The screening showed that 18 (24.00%) of Bali cattle were anemic. Levels of Hb, PCV, TEC, MCV, MCH and MCHC in anemic Bali cattle were 7.15 ± 1.61 g/dl, $21.15 \pm 4.16\%$, $3.72 \pm 1.10 \times 10^6/\mu\text{l}$, 52.75 ± 4.13 fl, 17.31 ± 1.86 pg and 32.77 ± 1.69 g/dl respectively. Hematological values of Hb, PCV, TEC, MCV, MCH and MCHC were significantly ($p < 0.05$) lower in anemic Bali cattle compared to non-anemic Bali cattle.

Keywords : anemia, Bali cattle, alterations, hematology

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