

## Blood and Biochemistry Profiles of Sambar Deer (*Cervus unicolor*) under Different Adaptation Periods

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### Abstract

Hematological and biochemical analyses were carried out on 53, 2-year old Sambar deer (*Cervus unicolor*) of which 44 were from Taman Pertanian Universiti, Universiti Putra Malaysia and 9 deer obtained from Lenggong, Perak, Malaysia in July, 2009. Haematology and serum biochemical parameters were analysed and compared between groups of deer. The study revealed that deer from Lenggong had significantly ( $p < 0.05$ ) higher packed cell volume (PCV), erythrocyte (RBC) and lymphocyte counts, mean cell volume (MCV), hemoglobin, plasma and total protein concentrations than those from TPU. The biochemical data also revealed significant ( $p < 0.05$ ) differences in eight parameters. Lenggong deer had significantly ( $p < 0.05$ ) higher serum  $\text{Na}^+$ ,  $\text{K}^+$ , alkaline phosphatase (ALP) and albumin concentrations but lower  $\text{Cl}^-$ , glucose, total bilirubin and alanine transaminase (ALT) concentrations. Among the parameters analysed only ALT, aspartate transaminase (AST), creatine kinase (CK) and ALP were higher than reference values.

**Keywords:** Sambar deer, blood, biochemistry, adaptation periods