

Haematology and some blood biochemical values of nine tranquilized Samburs (*Cervus unicolor*) in captivity

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The Ceylon Sambar is the largest out of the four deer species present in Sri Lanka. Information on wild or captive Ceylon Sambar is very scarce and no reference haematological values are available. Blood samples were carried out on nine samburs held in captivity at Sigiriya. Blood samples were collected after tranquilization with large animal Immobilon.

Haematology was carried out using standard techniques. The haematological values (Mean \pm SD) obtained were Red blood cells ($\times 10^{12}/L$) 9.24 ± 3.18 , Packed cell volume (%) 33.3 ± 7.3 , White blood cells (number/l) 5687 ± 1794 , Mean corpuscular volume (MCV) (fl) 4.14 ± 1.46 , Haemoglobin concentration (g/dL) 5.25 ± 1.28 Mean corpuscular haemoglobin (MCH) (pg) 5.315 ± 1.98 and Mean corpuscular haemoglobin concentration (MCHC) (g/dL) 13.13 ± 5.011 . Erythrocyte morphology revealed sickling, which is a characteristic feature of *cervid* family.

The absolute Differential count (Mean \pm SD) were Lymphocytes 2773.5 ± 1085.5 , Neutrophils 2434.4 ± 895.2 , Neutrophils (band) 82.5 ± 115.5 , Monocytes 220.6 ± 183.1 , Eosinophils 148.3 ± 121.7 and Basophils 28.6 ± 48.7 . The presences of high Lymphocyte counts over the neutrophils, as in some of the other ruminant species, were also encountered. But two animals had high neutrophils counts than the lymphocyte counts, possibly due to handling and anesthesia. Most of the blood lymphocytes were laden with azurophilic granules in the cytoplasm. Total protein and fibrinogen levels (Mean \pm SD) of the examined samples are 65.89 ± 16.13 and 22.36 ± 12.57 respectively.

The values obtained in this study by using tranquilization may be different from the normal values under natural conditions as the chemical immobilization reduces the haematological parameters significantly. However, this could be used as a guide on the future studies on Ceylon sambar.