

## **Blood Profile of Rusa Deer (*Cervus timorensis*)**

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### **Abstract**

The objective of the study was to establish the reference range for blood and coagulation parameters in normal, healthy male and female rusa deer (*Cervus timorensis*) of different ages. The study was conducted at Taman Pertanian Universiti, Universiti Putra Malaysia. The sample population comprised of 40 rusa deer, which was divided into 4 groups of 13 young ( $\leq 1$ -year-old) males, 5 young females, 13 adult males and 9 adult females. Jugular venous blood samples were collected to determine concentrations of blood and coagulation parameters. The data obtained were normally distributed. However, the analytical results revealed that significant ( $p < 0.05$ ) higher values were observed in erythrocyte count,  $Ca^{++}$  concentration and prothrombin time in the adult male than female rusa deer. The total protein concentration was significantly ( $p < 0.05$ ) higher in adult female than adult male rusa deer. No significant difference ( $p > 0.05$ ) in blood or coagulation parameters was observed between sex in the young deer. Between age group, adult deer had significantly ( $p < 0.05$ ) higher mean cell volume, plasma protein and globulin concentrations than young rusa deer. Thus, it is necessary to take into account the age and sex when using blood reference values for the diagnosis of diseases in the rusa deer.

**Keywords:** Rusa deer, blood, coagulation, parameter, sex, age