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Erythrocyte Glutathione Peroxidase Activity for Assessment of Health Status of the Timorensis Deer (*Cervustimorensis*)

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Abstract

Erythrocyte glutathione peroxidase activity analysis was carried out on 40 Timorensis deer (*Cervus timorensis*) of which 30 were born in Taman Pertanian Universiti (TPU), Universiti Putra Malaysia (UPM) and the remaining 10 born in Lenggong, Perak and relocated at TPU in July 2009. The haematological and serum biochemical analyses and serological disease screening on melioidosis, brucellosis, Johne's disease and caseous lymphadenitis (CLA) were done to evaluate the health status of these deer. Comparisons of erythrocyte glutathione peroxidase activity were made between different TPU-born and Lenggong-born deer, age groups and sexes of these deer by using a manual DTNB direct method. The analyses and screening showed that the deer were clinically healthy and disease-free. There were no significant ($p>0.05$) difference in glutathione peroxidase activity different TPU-born and Lenggong-born deer or age groups and sexes of these deer. Evaluation of erythrocyte glutathione peroxidase activity plays an important role in disease correlations and can be used inassessment of health status of the Timorensis deer.

Keywords: Timorensis deer, erythrocyte glutathione peroxidase, manual DTNB direct method