BIOCHEMICAL VALUES IN WHOLE BLOOD OF HORSES USED FOR HYPERIMMUNE SERA PRODUCTION

T.S. Baptista^{1,2*}, C.B Zamboni¹, J.A.G. Medeiros¹, J. R. Marcelino², M.G. Freitas²

¹ Instituto de Pesquisas Energéticas e Nucleares (IPEN / CNEN - SP) Av. Professor Lineu Prestes 2242 05508-000 São Paulo, SP- Brasil tatyana@butantan.gov.br

> ² Instituto Butantan Av Vital Brasil 1500 05503-900 São Paulo, SP - Brasil

Biochemical values were determined in whole blood of horses using NAA. This analysis is very important because it will allow studying in more details the evolution of the hyperimmunization process in serum production at Institute Butantan in Brazil. Now days, this institution is responsible for 80% of total hyperimmune sera production in Brazil. To perform these analyses 40 horses (crioulo race) of average mass 350 kg, without clinical signs of disease, age with 12-36 months, females and males animals, kept on pasture in São Joaquim Farm at Butantan Institute (São Paulo city), were used. About 2 ml of whole blood was taken from jugular vein in vacuum plastic tube, although anticoagulants, using needles of 25 x 8mm. Aliquots of 100 (prepared in duplicate) were then transferred to the filter paper and dried for few minutes using an infrared lamp. Each sample was sealed into an individual polyethylene bag and irradiated with thermal neutrons in the IEA-R1 nuclear reactor at IPEN. The concentration results for elements of clinical relevancy (Ca, Cl, K and Na) were obtained and the reference intervals taken \pm 2 SD (Standard Deviation). We intend to use the present data as interval in whole blood of horses for clinical practice for checking the health status of these animals during the hyperimmunization process.

Financial Support: FAPESP and CNEN