

**EVIDENCE OF *TOXOPLASMA GONDII* ANTIBODIES IN CAPTIVE ELEPHANTS
(*ELEPHAS MAXIMUS MAXIMUS*) IN SRI LANKA**

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Toxoplasmosis, causes abortion, stillbirth, congenital abnormalities, uveitis and encephalitis in humans and in many mammals. However naturally infected humans and animals are usually asymptomatic and evaluation of serum antibody titre is important to determine the presence of *Toxoplasma* infection. Such information is important in preventing spread of this infection to other animals and humans closely associating the captive elephants.

In this study, 45 privately owned, apparently healthy captive elephants from 5 districts were used. They were between the ages of 20 to 65 years. Blood was collected during August 2003 - June 2004 in order to detect the presence of antibodies against *Toxoplasma gondii*. Blood samples were transported on ice to the laboratory, serum separated immediately and frozen until analysed using a direct modified agglutination test.

Sera of 14 of 45 (32%) elephants were found to be positive for the test. Highest titre reported was 1:400. A significantly high number of females (11/14) were positive for *T.gondii* antibodies compared with the male elephants ($P = 0.02$). The differences in titres among the age groups of elephants were not significant ($P > 0.05$).

It appears that sero-conversion for Toxoplasmosis is common among the Sri Lankan captive Elephants resulting from either infection or exposure. Considering the nature of the infection, the sero-positive animals could become clinically diseased when immunocompromised. Elephants, if infected, may have contacted this disease through faecal contamination from wild, semi wild or domestic animals. The possibility of transmitting the infection from elephants to humans or to other animals is of importance. This is the first report on presence of antibodies to *T. gondii* infection in elephants in Sri Lanka.