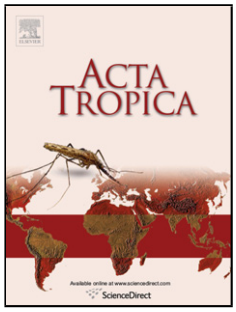

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Prevalence of antibodies against *Toxoplasma gondii* and *Neospora* spp. in equids of Western Pará, Brazil

Thiago Rocha Moreira[1], Cristiane Sarturi[1], Felipe Nascimento Stelmachtchuk[1], Emelie Andersson[2], Emma Norlander[2], Francisco Leonardo Costa de Oliveira[3], Juliana Machado Portela[1], Arlei Marcili[4], Ulf Emanuelson[2], Solange Maria Gennari[3,4], Antonio Humberto Hamad Minervino[1]

[1] Laboratory of Animal Health, LARSANA, Federal University of Western Pará, UFOPA. Vera Paz Street, s/n, CEP 68100-000, Santarém, Pará, Brazil.

[2] Swedish University of Agricultural Sciences

[3] Faculty of Veterinary Medicine and Animal Science, FMVZ, University of São Paulo, São Paulo, USP, Brazil.

[4] Masters in Medicine and Animal Welfare, Santo Amaro University, Av. Prof. Eneas de Siqueira Neto, 340, São Paulo, 04529-300, Brazil

Corresponding author: AHH Minervino, email: ah.minervino@gmail.com

Highlights

- Frist serological study for *T. gondii* and *Neospora* sp in 1,298 equids from 18 municipalities of Pará State.
- Farm, sport and carthorses had similar prevalence of *T. gondii* antibodies, however *Neospora* spp. antibodies were more prevalent in carthorses.
- 61% and 44% of the municipalities sampled had positive equids to *T. gondii* and *Neospora* spp. antibodies, respectively.

ABSTRACT

The present study aimed to determine the prevalence of antibodies against *Toxoplasma gondii* and *Neospora* spp. in equids raised for distinct purposes in the western state of Pará, Brazil, and to identify potential risk factors associated with parasite infection. A cross-sectional study was conducted with cluster sampling in 101 farms from 18 municipalities (farm horses). In visited municipalities, samples from sport and cart horses were included. Serum was obtained for detecting antibodies against *T. gondii* and *Neospora* spp. using indirect fluorescent antibody test, with a cut-off point of 1:64 and 1:50, respectively. Association analysis, using the chi-square test, was performed to evaluate possible risk factors related to the prevalence of antibodies. A total of 1,298 equids were sampled (947 farm, 240 sport, and 111 cart horses), including 1,244 horses, 2 donkeys, and 52 mules. The number of equids sampled per property ranged from 1 to