

reversion to susceptibility are very slim. In the pre and post treatment stool cultures, all larvae obtained were classified as cyathostomes. Benzimidazoles resistance is widespread in the central area of Argentina^[3]. In this context, the use of these drugs to control small strongyles could be currently inadvisable unless controls are carried out post treatment to establish efficacy thereof. Practitioners need to determine if anthelmintic resistance is present before advice control parasite programs. Presently, FECRT is the most appropriate method for these practices and should be used regularly to monitor the resistance status on horse farms.

Acknowledgements

Financial support was obtained from INTA (National Institute of Agricultural Technology from Argentina) CIAC 940143 financial support was obtained from INTA CIAC 940143.

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Isolation of *Sarcocystis neurona* from an opossum (*Didelphis albiventris*) in Argentina

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Sarcocystis neurona is an Apicomplexan parasite which affects a wide range of animal hosts. This protozoan is the main cause of equine protozoal myeloencephalitis (EPM) in Western Hemisphere horses. The parasite reproduces sexually in the intestine of definitive hosts (DH) and asexually in tissues of intermediate and aberrant hosts. The geographical distribution of *S. neurona* is related with the distribution its definitive hosts, the opossums *Didelphis virginiana* and *D. albiventris*. A recent serological study conducted in Argentinean horses using *S. neurona* antigen revealed an overall seroprevalence of 26.1%. However, the parasite has not been isolated in Argentina. Tissues from an opossum (*D. albiventris*) hunted by dogs in a farm from the central region of Buenos Aires province were collected. Horses raised in the farm showed a 50% (10/20) *S. neurona* seroprevalence. One seropositive horse developed neurological signs and evidenced clinical improvement after a 2 month treatment with Ponazuril. A complete necropsy of the opossum was conducted and the intestinal mucosal scraping was subjected to a parasitological study with

sucrose solution. A high amount of *Sarcocystis* spp. oocysts/sporocysts were observed (Fig. 1). DNA was extracted from concentrated oocysts with a commercial kit (ZR Fecal DNA, Zymo Research). The sample was identified as *S. neurona* by specific PCR-restriction fragment length polymorphism (RFLP) and by sequencing of a fragment of the 18S rRNA gene. Approximately 5×10^5 oocysts were subjected to a pepsin-HCl digestion followed by a physical disruption. Released sporozoites were used to infect fresh BM cell cultures, maintained by 3 passages during 2 months and further preserved in liquid nitrogen. This study represents the first isolation of *S. neurona* in Argentina. Further studies will be conducted in order to identify antigen expression as well as to compare genetic characteristics between the isolated strain and reference strains.



Figure 1. *Sarcocystis* spp. oocysts collected from opossum intestinal scraping after sucrose flotation.

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Divergent CFT results of eight Dourine-positive horse sera using different *Trypanosoma equiperdum* and *T. evansi* antigens

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Dourine is caused by the protozoan parasite *Trypanosoma equiperdum* and is a serious, often chronic, venereally transmitted disease of horses and other equids. Once widespread, Dourine has been eradicated from many countries but may still be detected in horses in Asia, Africa, South America, Southern and Eastern Europe, Mexico and Russia. It was reported in June 2011 in Sicily and north of Naples, on the Italian mainland [1]. Dourine is an OIE listed notifiable disease. Laboratory diagnosis of Dourine is performed through serological tests such as CFT, IFAT and ELISA. The OIE recommended test for international trade of