4th International Conference on Non Tsetse Transmitted Animal Trypanosomosis

Abstract

**Title** (maximum 30 words)

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| High sero-prevalance of equine trypanosomosis, equine piroplasmosis, equine infectious anemia virus and west Nile virus in a herd of semi-wild horses from North Argentina. |

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**Abstract** (maximum 300 words)

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| **Introduction**  Northern Argentina hosts equine population live under semi-wild conditions with limited access to veterinary care. These horse populations are in contact with *i*) wildlife animals considered as reservoir of potential horse pathogens (eg *Capybara*, *Coatis, Pampas Deer*) and *ii*) potential vectors such as ticks, horse flies and vampire bats. In this context, the aim of this study was to evaluate the seroprevalence for various regulated horse diseases in a herd of horses from a farm located in North Argentina.  **Materials and methods**  Serum samples were collected from 51 horses in a farm (surface: 3,000 hectares) located in Chaco province. Serum samples were tested for equine trypanosomosis (ET), equine piroplasmosis (*Theileria equi,* EP) and glanders by complement fixation test, for equine infectious anemia virus (EIAV) by agar gel immunodiffusion and for equine viral arteritis (EVA), West Nile virus (WNV), Eastern equine encephalomyelitis virus (EEEV), Western equine encephalomyelitis virus (WEEV) and Venezuelan equine encephalitis virus (VEEV) by virus neutralisation test.  **Results and discussion**  Most of these horses presented regular health conditions although few of them presented clinical signs. The presence of potentials vectors (ticks and horse flies) was confirmed and a fresh bite of a vampire bat (*Desmodus rotundus*) was observed. The sero-prevalences were 59 % (30/51) for equine trypanosomosis, 69 % (35/51) for equine piroplasmosis and 100 % (51/51) for EIA and WNV. The animals were seronegative for the other tested diseases. Among these horses, four were identified as highly seropositive for ET, EP, EIAV and WNV.  The data of this serological study illustrate the need for surveillance programs and control measures in North Argentina and to our knowledge, constitutes the first report of horses seropositive for ET, EP, EIAV and WNV. |