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Veterinary Virology: VV

and can be applied in field samples. Financial support: FAPESP (processo 2011/04677-0)

## VV433 - NECROMYS LASIURUS RODENT AS A POTENCIAL RESERVOIR OF OLIVEROS VIRUS (ARENAVIRIDAE: ARENAVIRUS) IN BRAZIL

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Arenaviruses are members of the family Arenaviridae that consists of a unique genus (Arenavirus) that currently comprises 25 species. New World Arenavirus belong to the Tacaribe sorocomplex and are genetically divided in four groups: Clade A, A-recombinant, B and C. Until now Clade C is the smallest group within South America Arenavirus, being composed only by Latino (LATV) and Oliveros virus (OLVV), hosted by the sigmodontine rodents Calomys callosus and Necromys benefactus (formely Bolomys obscurus), respectively. OLVV was discovered in central Argentina in ecological studies of rodents hosts of Junin virus. In our study, the presence of OLVV was investigated among N. lasiurus rodents from Sidrolândia and Cassilândia municipalities. Those municipalities are situated in Mato Grosso do Sul State where there is no description of arenavirusassociated hemorrhagic fever, although they are near areas where circulation of those viruses are well documented. Fieldworks were conducted independently during different years for rodent trapping (2005, 2008) and 2009). The rodents were captured in Sherman and Tomahawk live traps, and processed in a laboratory installed in the field. All trapped rodents were submitted kariological and morphological identification. Rodent spleen or liver samples were submitted to RT-PCR amplification of partial S segment using specific oligonucleotide primers of the S segment of Junin virus. A total of 62 N. lasirus rodents were captured and 12 animals were test positives (19,3%) by RT-PCR. The nucleotide sequence of the obtained amplicons showed high similarity 82% with OLVV strains. This is the first record of OLVV outside Argentina, and also the first genetic description of a rodent of the N. lasiurus specie infected with this virus. Our results suggest that N. lasiurus is a potencial reservoir for Oliveros virus in Brazil and that Mato Grosso do Sul State seems to be a hot zone for arenaviruses. Financial support: CNPq and **FIOCRUZ** 

## VV437 - EQUINE INFECTIOUS ANEMIA DIAGNOSIS BY PCR, ELISA AND AGID IN URBAN EQUIDS FROM CORUMBÁ AND LADÁRIO, MS, BRAZIL

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Equine infectious anemia (EIA) is an equine disease caused by a retrovirus within the lentivirus genus. The equine infectious anemia virus (EIAV) is considered endemic in the Pantanal region and shows high prevalence among working equines and mules used in beef cattle ranches. In urban zones, there are many people who use equids for recyclable garbage collection as their main work. This disease is incurable, the basic care is to find the seropositives by the AGID test, recommended by OIE, and proceed with euthanasia or isolation in areas where the EIAV is endemic. An alternative for the EIA diagnosis is the ELISA test, but since both are serologic tests, only the presence of antibodies are detected and not the presence of the virus itself. PCR test can be a very useful tool to remove doubts given by the serologic tests in cases where the results are unsure as shown in previous papers. To evaluate a LTR region semi-nested PCR method for EIA diagnosis, blood of 70 equids from Corumbá and Ladário, used in animal traction vehicles, were collected in March, 2013. Samples were processed by taking the serum for serologic tests and the leukocytes for DNA extraction. After tested, 37% of samples were positive in ELISA rgp90, 23% were positive by p26-AGID test and 21% were nested PCR positive. Eleven AGID negative and 10 PCR negative samples were ELISA positive. All ELISA negatives were also PCR and AGID negatives and all PCR positives were positives in the serologic tests too. PCR results may be caused by different viral strains, since it's known that this type of virus is very susceptible to mutations and the primers weren't designed for horses from this region. The PCR method showed 90% correlation with p26-AGID and 84.30% with ELISA rgp90. In conclusion, the ELISA shows high sensitivity and is the best to be used as screening, but positive samples should be tested by AGID or nested PCR.

## VV460 - BOVINE PAPILLOMAVIRUS TYPE 13 DNA IN EQUINE SARCOIDS

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