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Porcine reproductive and respiratory syndrome virus (PRRSV) causes an economically important disease in commercial swine worldwide. There is no evidence of PRRSV infection in Brazilian pigs, but no surveillance is performed regularly. The objective of this work was to detect PRRSV (antibodies and RNA) in commercial herds, in quarantine imported pigs or in boar studs of artificial insemination centers. For that, oral fluid (OF - a mix of saliva and oral mucous transudate), an innovative methodology besides sera was used. OF contains both pathogen and antibody and has been used in human and in veterinary medicine for the diagnosis of infectious diseases, with excellent results, as compared to serum samples. For swine production this method has been used in surveillance of classical swine fever, influenza, besides PRRS. This study tested 3.680 sera and 232 oral fluid samples collected from 2009 to 2011 in eight Brazilian states using the IDEXX HerdChek* PRRS Antibody Test Kit. Samples included nursery (8-10 weeks of age - aiming to verify circulation of PRSSV in nursery pigs, avoiding cross-reaction with maternal antibodies), quarantine and also culled pigs. Results indicated that only three sera samples (3/ 3.680) were positive. These three positive serum samples were re-tested by ELISA and also analyzed by real-time PCR, which was able to detect 2.6x103 molecules/uL of PRRSV in the positive control. However, all ELISA positive serum samples were negative by real-time PCR. Oral fluid samples collected from the equivalent pig group also resulted negative by ELISA. Although no surveillance test was performed, samples analyzed here show no evidence of PRRSV infection on Brazilian swine herds. Furthermore, demonstrates that oral fluids can be a valuable sample tool for monitory of infectious diseases in Brazilian swine herds, helping sanitary authorities design contingency plans.

VV1051 - DETECTION OF EMERGING PARVOVIRUSES AND ANELLOVIRUS IN LUNG OF CAPTIVE WILD BOARS

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Parvoviruses are ubiquitous and infect a wide range of species of wild and domestic animals. Porcine parvovirus 1 (PPV1) can cause reproductive failure in swine and also infects wild boars. Porcine parvovirus 2 (PPV2) was identified in swine serum in Myanmar. The porcine hokovirus (PHoV) was first identified in China and is genetically close to human PARV4. Porcine parvovirus 4 (PPV4) was first detected in pigs in China. Torque teno sus virus 1 and 2 (TTSuV1 and TTSuV2) are distributed in swine and wild boars.

Until now, there is no disease assigned to these emerging viruses in swine and wild boar. The aim of this study was to detect parvoviruses and anelloviruses in lung of captive wild boar. Sixty lung samples were collected in a slaughterhouse in the Rio Grande do Sul State, in 2011 from wild boars that had pulmonary consolidation lesions from two herds (A and B). DNA extraction was performed using a kit based on silica. PCR to detect PPV1, TTSuV1 and TTSuV2 were performed according to described previously, for PPV2, PPV4 and PHoV were standardized in our laboratory. PCR results showed (33%, 20/60) positive samples for PPV1, (26.6%, 16/60) for PPV2, (61.6%, 37/60) for PHoV, (45%, 27/60) for PPV4, (53.3%, 32/60) for TTSuV1 and (51.6%, 31/60) for TTSuV2. In herd A, PHoV was highly detected, with (87%, 27/31), followed by TTSuV2 with (54.8%, 17/31), PPV4 with (51.6%, 16/31), TTSuV1 with (38.7%, 12/31), PPV2 with (29%, 9/31) and PPV1 was not detected. In herd B, TTSuV1 and PPV1 showed the same number of positive samples (68.9%, 20/29) followed by TTSuV2 with (48.3%, 14/29), PPV4 with (37.9%, 11/29), PHoV with (34.5%, 10/29) and PPV2 with (24.1%, 7/29). PHoV was the main virus detected in lung samples, as similarly described previously in Europe. This is the first report of these emerging parvovirus in captive wild boars in Brazil; but, their pathogenicity remains unknown. Financial Support: CNPq and Fapergs

VV1053 - DEVELOPMENT OF REVERSE GENETICS SYSTEMS FOR INFECTIOUS BURSAL DISEASE VIRUS BY YEAST-BASED HOMOLOGOUS RE-COMBINATION

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Infectious Bursal Disease Virus (IBDV) is a pathogen causing immunosuppressive disease in young chickens. In Brazil, the IBDV economic importance is observed in the death of chickens with immunosuppression and acute infection. Viral reverse genetic system is the virus generation/recovery from cloned viral cDNA or in vitro transcribed viral RNA transfection methods. Advances in the replication understanding and vaccines/viral vectors development for IBDV have been achieved by means of viral reverse genetic. Reverse genetic for IBDV has undergone changes over time. The first reverse genetic system for IBDV was possible by transfection into Vero cells with in vitro transcribed viral RNA. Improved techniques were followed by transfection of viral cDNA cloned downstream of the polymerase II promoter. However, all plasmid strategies used to generate particles of IBDV involves multiple rounds of amplification and need of in vitro ligation and restriction sites. Thus,