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## Survey of *Toxoplasma gondii*, *Brucella* spp., and *Leptospira* sp antibody in Eurasian wild boar (*Sus scrofa*) from southern Brazil\_Partial results.

Virginia Santiago Silva<sup>1</sup>, Luiz Carlos Bordin<sup>1</sup>, Iara Maria Trevisol<sup>1</sup>, Beatris Kramer<sup>1</sup>, Régia Maria Feltrin Dambrós<sup>2</sup>, et al.

<sup>1</sup> Embrapa Swine and Poultry

<sup>2</sup> CeDISA/Centro de Diagnóstico de Sanidade Animal

The Eurasian wild boar (*Sus scrofa*), an invasive alien species, was introduced in Brazil in the last decades and free-living populations were established in Santa Catarina and other Brazilian States. These animals are known as potential reservoirs of zoonotic pathogens that can be transmitted through contact with bodily fluids and handling or ingestion of infected tissues or even through contaminated water. Our objective was to investigate the presence of antibodies against *Brucella* sp, *Toxoplasma gondii* and some serovars of *Leptospira* in wild boars hunted in western Santa Catarina. From August until December 2012 legally authorized hunters harvested blood samples from 44 wild boars. Blood from heart or thoracic cavity were sampled in sterile plastic tubes as soon as possible after shot and were transferred to the laboratory at 4°C. Serum was recovered by centrifugation and frozen at -20° C until analysis. Sera were screened for the presence of antibodies against *Brucella* sp, *Toxoplasma gondii* and *Leptospira* serovars *L. autumnalis*, *L. ballum*, *L. Bratislava*, *L. grippotyphosa*, *L. hardjo*, *L. icterohemorrhagiae*, *L. Pomona*, *L. tarassovi* and *L. wolffi* by Rose Bengal Test (RBT), qualitative and semi-quantitative indirect hemagglutination test (IHA) and Microscopic Agglutination test (MAT). Antibody titers equal or higher than 1:64 were considered positive for *T. gondii*. Antibodies against *T. gondii* were detected in five wild boar (11,36%), showing titers range between 1:64 and 1:256. The role of wildlife as sentinels for human and animal diseases is well known. The absence of antibodies to *Leptospira* was a positive finding, considering that most of the sera in this study were obtained from animals hunted near the forest area, where there are several other host wild mammals living in sympatry. Furthermore, the region studied is also one of the main areas of swine production and the risk of contact between free-living wild boar and domestic swine is a major concern for swine industry. In this sense, the absence of antibodies against *Brucella* sp was a good indicator for both human and for livestock health, although the sample is not enough to make larger inferences. Since swine Brucellosis is considered a disease of occupational exposure, hunters and consumers of wild boar should be aware of the potential risk in handling organs and fluids of infected boars. Veterinarians and Public health authorities should be aware to the risk of zoonosis in areas of wild boar's invasion. In this region, it is also very important to the consumers be alerted to avoid eating undercooked wild boar meat. This work is part of a project to develop a plan for control and health monitoring of wild boar population in Brazil, involving Empresa Brasileira de Pesquisa Agropecuária (Embrapa), ICMBio (Instituto Chico Mendes de Conservação da Biodiversidade), Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Ibama), Ministério da Agricultura, Pecuária e Abastecimento (MAPA) and Instituto Javali Brasil (IJB).