duration of the titles, and their reactions were detected earlier than those observed in the crossbred sheep. According to the molecular diagnosis, the Santa Inês sheep presented more reactions (urine and vaginal fluid) compared to crossbred, but there was no predominance in the detection of leptospiral DNA when comparing urine and vaginal fluid results, nor even between the number of positive kidney and uterus. The Santa Inês sheep presented a higher number of positive bacteriological cultures. **Conclusion:** Pure-bred sheep may be more susceptible than crossbred ones to *Leptospira* sp. infection. The obtained results emphasized the importance of the genital tract as a site of extraurinary infection and indicate the possibility of venereal transmission in sheeps. **CEUA:** 020/2016. **Funding:** CNPq, Capes.

50. SUSCEPTIBLE OF *LEPTOSPIRA INTERROGANS* TO THE SNAKE VENOMS

Suscetível a *Leptospira interrogans* para os venenos de cobra

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Introduction: Nowadays bacterial resistance to antibiotics are becoming an important cause of failures in infectious diseases therapy. Snake venoms have antimicrobial activity and are being used as drugs. Their activity on *Leptospira* is still unknown. **Objective:** To report on the susceptible profile of *L. interrongans* to venoms of *Bothrops pauloensis* and *Crotalus durissus terrificus*. **Methods:** 200µl of culture of *Leptospira interrogans* serovar Icterohaemorrhagiae was subjected to serial decimal dilutions with 200µl of *Bothrops* venom at 3,0mg/mL. Being the first well of the plate, the one of highest concentration of the venom, and the fifth, the lowest concentration (3×10^{0} and 3×10^{-4} respectively). The same procedure was performed for *Crotalus* venom. Samples were observed under microscope for analysis of the movement and viability of *Leptospira*, before and after the addition of the venom, with 0, 24, 48 and 72 hours of incubation. After 72 hours, to confirm the inhibition of bacterial growth, all dilutions were inoculated in EMJH, incubated for seven days and then observed under a microscope. **Results:** *Leptospira* was resistant to *Bothrops* venom, as it continued with unchanged motility, even after 72 hours of venom addition, and the culture of the five dilutions in EMJH after seven days of incubation demonstrated the presence of viable *Leptospira* in all tubes. The efficiency of *Crotalus* venom was dose-dependent. *Leptospira* ceased the movement after 48 hours of the addition of the venom, in the concentration 3×10^{0}mg/mL and after 72 hours in the other dilutions. When these dilutions were cultivated in EMJH for seven days, was observed the presence of viable *Leptospira* in the cultures corresponding to the dilutions 3×10^{-2}, 3×10^{-3}, 3×10^{-4} mg/mL. Bacteria were susceptible to *Crotalus* venom at 3×10^{0} and 3×10^{-1} mg/ml concentrations. **Conclusion:** *Leptospira* is susceptible to *Crotalus* venom at the highest concentrations. **CEUA:** Not applicable. **Funding:** Capes, Fapemig.

51. USAGE OF A COMBINATION OF T80/40LH MEDIUM+STAFF COCKTAIL FOR CULTURING LEPTOSPIRAL STRAINS FROM SEJROE SEROGROUP

Uso de combinação de coquetel de meio t80/40lh + staff para a cultura de estirpes leptospirais do sorogrupo Sejroe

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Introduction: Bovine leptospirosis is an infectious-contagious disease of worldwide distribution, endemic in tropical countries. Correlation between reproductive problems and *Leptospira* infection has been demonstrated, especially for strains of serogroup Sejroe. However, culturing those strains from bovine clinical samples is still challenging, since it is laborious and demands expertise. **Objective:** The present study aimed to analyze the growth dynamics of leptospiral strains from serogroup Sejroe in different culture media in order to suggest better approaches for primary culturing

from bovine clinical samples. **Methods:** *Leptospira* strains belonging to Sejroe serogroup were studied: *L. interrogans* serovar (sv) Hardjo; *L. borgpetersenii* sv Hardjo; *L. santarosai* sv Guaricura (BOVG); and *L. santarosai* sv Guaricura (U140). Two culture media were used: EMJH (using enrichment compounds separately - Rabbit Serum; Bovine Albumin and; Sodium Pyruvate) and T80/40LH. In addition, three cocktails of selective agents were chosen: STAFF, A5 and CHID. Combinations between medium, enrichment additives and antimicrobial cocktails resulted in 20 different formulae that were tested individually. Evaluation was done by manual counting in Neubauer chamber every 48 hours for 16 days. **Results:** The most notable outcome was the poor performance of *L. borgpetersenii* in EMJH, even when enrichment additives were used. The inability of this medium on supporting this strain growth possibly represents a bias on culturing those strains from clinical bovine samples. In the present study, T80/40LH was the most efficient medium for culturing *L. borgpetersenii*. **Conclusion:** Although there are no studies employing T80/40LH added to STAFF cocktail, the outcomes of the present study suggested that this combination is a good choice for obtaining a higher number of *L. borgpetersenii* strains from bovine origin. **CEUA:** Not applicable. **Funding:** This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (Capes) – Finance Code 001 and Faperj.

52. WILD BOARS (SUS SCROFA) ARE RESERVOIRS OF LEPTOSPIRA INTERROGANS IN URUGUAY

Javalis (*Sus scrofa*) são reservatórios de *Leptospira interrogans* no Uruguai

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Introduction: Zoonotic pathogens from wildlife represent the most significant source of emerging infectious diseases. The population of wild boars, an invasive and destructive species, has increased substantially in Uruguay over the last decades, and recreational hunting of these animals is allowed since 1996. Wild boars are susceptible to leptospirosis; however it is not known whether they act as *Leptospira* spp. reservoirs in Uruguay. **Objective:** The aim of this study was to assess the infection of wild boars by pathogenic species of *Leptospira* in Uruguay. **Methods:** Thirty-four wild boar carcasses obtained at a recreational hunting festival, were the source of kidney samples, which were processed by qPCR for the *lipL32* gene of pathogenic *Leptospira* spp., *rrs* sequence genotyping and bacterial culture. *Leptospira* isolates were typed by molecular and serologic approaches. Six qPCR-positive and three qPCR-negative kidneys were fixed in formalin and processed for histopathology and immunohistochemistry (IHC) for the detection of *Leptospira* antigen. **Results:** Six of the 34 animals (17.6%) were positive by *lipL32* qPCR. All six animals were infected by the species *L. interrogans*, as determined by *rrs* sequence genotyping. *Leptospira interrogans* serogroup Pomona, serovar Kennewicki was isolated from one sample. Histopathologic examination revealed cortical interstitial or tubulointerstitial nephritis in 7/9 animals. Abundant intralesional *Leptospira* antigen was detected by IHC in 2/7 animals with renal lesions, that had also tested positive by qPCR. **Conclusion:** Wild boars in Uruguay are reservoirs of pathogenic *Leptospira interrogans* serovar Kennewicki, which has also been isolated from cattle, sheep and human cases in this country. Wild boars are thus implicated in the sylvatic epidemiologic cycle of leptospirosis and could represent a risk for animal and public health. **CEUA:** Not applicable. **Funding:** ANII, INIA and Institut Pasteur of Montevideo.