

de *Leptospiras* em bovinos não vacinados contra a leptospirose, criados na Serra da Canastra, Estado de Minas Gerais, Brasil. **Métodos:** Foram testadas 100 amostras de soro sanguíneo de bovino, não vacinados, criados na cidade de Vargem Bonita, Serra da Canastra, Minas Gerais. As amostras de soros foram obtidas da soroteca do hospital veterinário da Uniube. A triagem e a titulação foram realizadas por meio do teste de soroa-glutinação microscópica (SAM), utilizando um painel com representantes de 12 sorogrupos de *Leptospira* spp. (Australis, Autumnalis, Bataviae, Canicola, Djasiman, Grippytyphosa, Hebdomadis, Icterohaemorrhagiae, Pomona, Pyrogenes, Sejroe e Tarassovi). **Resultados:** A reatividade no SAM foi de 54% (54/100), sendo que 83,3% (45/54) dos animais reagentes tinham mais de 12 meses de idade. Foram detectadas aglutininas contra os sorogrupos Australis, Djasiman, Hebdomadis, Icterohaemorrhagiae, Pomona, Sejroe e Tarassovi. O sorogrupo Sejroe foi o mais frequente. Foi verificado o título de 1.600 em única fêmea, assintomática. **Conclusão:** Há circulação de leptospiras entre os bovinos da Serra da Canastra, estado de Minas Gerais, Brasil, e o sorogrupo Sejroe é o mais frequente. **Financiamento:** Fundação de Amparo à Pesquisa de Minas Gerais (Fapemig) e CNPq.

#### 40. PHYLOGENETICAL INFERENCES OF FIVE ISOLATES OF LEPTOSPIRA OF SWINE BASED ON 16S AND SECY GENES

Inferências filogenéticas de cinco estirpes isoladas de *Leptospira* de suínos baseados nos genes 16s e secY

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**Introduction:** Leptospirosis is a zoonosis responsible for economic and health damage in swine herds. The

cultivation and typing of leptospire strains present in one region are still an important subject to bring knowledge for disease control. **Objective:** To perform cultivation and molecular characterization of leptospire strains isolated from swine slaughtered in São Paulo state, Brazil, in 2016. **Methods:** It was collected 980 urine samples and 74 kidney samples from swine slaughtered in São Paulo state (Brazil). Samples were cultured in EMJH and Fletcher medium, and the isolates were characterized by serogrouping techniques, lipL32-PCR, VNTR, 16S and secY sequencing. Phylogenetical inferences were performed with 16S and secY loci individually and with two concatenated genes using Bayesian inference. **Results:** Five isolates were obtained from urine and kidney samples, named Unespo1-05. Serogrouping showed three distinct serogroups for the isolates: Icterohaemorrhagiae, Autumnalis and Sejroe. All isolates showed to be pathogenic by lipL32-PCR. Two *Leptospira* species were found: *L. interrogans* and *L. santarosai*. Genotyping by the VNTR determined three distinct patterns: Icterohaemorrhagiae/Copenhageni (genotype I3/I6), Guaricura and one undescribed. The Bayesian tree was congruent with the current species classification in their general topology and most clades were highly supported. **Conclusion:** The isolation of leptospire from serogroups Icterohaemorrhagiae and Sejroe should be seen as an alert for surveillance systems and a concern for unique health. The isolates from serovar Autumnalis presented a genotype not yet described, showing a change in the genetic profile o, which can lead to changes in the behavior and adaptation of the bacterium. The isolates were grouped in phylogenetic trees with other leptospire of the same species, serogroup and geographic region of isolation, demonstrating the importance of knowing the etiologic agent that occurs in each region. **CEUA:** Approved by the Ethics Committee on Animal Use (CEUA) of the UNESP, Campus Jaboticabal - SP, Brazil, under No 12276/15. **Funding:** Doctoral Scholarship – CNPq (Processes: 141190 / 2016-7).