

## CONSENSOS EM LEPTOSPIROSE II

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### PHYLOGENETICAL INFERENCES OF FIVE ISOLATES OF SWINE *LEPTOSPIRA* 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 damages in swine herds. The cultivation and typing of leptospira strains present in one region are still an important subject for disease control.

**Objective:** To perform the cultivation and molecular characterization of leptospira strains isolated from swine slaughtered in the state of São Paulo, Brazil, in 2016.

**Methods:** 980 urine samples and 74 kidney samples were collected from swine slaughtered in São Paulo. 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 Unesp01-05. Serogrouping showed three distinct serogroups for the isolates: Icterohaemorrhagiae, Autumnalis and Sejroe. All isolates were shown to be pathogenic by *lipL32*-PCR. Two *Leptospira* species were found: *L. interrogans* and *L. santarosai*. Genotyping by 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 leptospira strains from serogroups Icterohaemorrhagiae and Sejroe should be 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 that 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, showing the importance of knowing the etiologic agent that occurs in each region. **Ceua:** Approved by the Ethics Committee on Animal Use (CEUA) of Unesp, campus Jaboticabal – SP, Brazil, under no. 12276/15. **Funding:** Doctoral Scholarship – CNPq (Processes: 141190 / 2016-7)

### OCCURRENCE OF ANTI-*LEPTOSPIRA* ANTIBODIES IN DOGS IN THE SOUTHWESTERN REGION OF THE STATE OF SÃO PAULO

Ocorrência de anticorpos anti*Leptospira* em cães na região sudeste do estado de São Paulo

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**Introduction:** Leptospirosis is an emerging disease with different prevalence in dog populations. Dogs are crucial in the disease epidemiology, acting as accidental or maintenance hosts. Infective serovars present different geographic distribution among these populations, depending on exposure to hosts from infected wild or domestic animal reservoirs. The most common serovars that infect dogs – prior to the introduction of the vaccines against leptospirosis – were Icterohaemorrhagiae and Canicola.

**Objective:** To analyze the occurrence of anti-*leptospira* antibodies in dogs from southwestern region of the state of São Paulo, using the microscopic agglutination test (MAT). **Methods:** Blood samples were collected from 449 dogs during a campaign of population control of dogs by UNISA-Projeto Extensão Universitária and Projeto Rondon<sup>®</sup>SP in the municipalities of Apiai, Cananéia and