

POPULATION OF RODENTS IN THE EASTERN OF SÃO PAULO: PRE- AND POST-CHEMICAL TREATMENT, THEIR ECTOPARASITES AND AGENTS OF ZONOSIS

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Aiming at determining the population of rodents before and after the chemical treatment promoted by the City Hall of the city of São Paulo, the prevalent species, development phase and sexual ratio were recorded. Also the presence of ectoparasites and the isolation of zoonosis agents, with an emphasis on *Leptospira* spp. in the animals captured were evaluated. The live capture methodology was used in a predetermined region of São Paulo, at the subdistrict of Itaquera, in the eastern part of the city. Sampling was carried out in two different periods: Autumn/Winter and Spring/Summer and comprised of 3 phases: Pre-chemical treatment census (10 to 15 days); Chemical treatment; Post-treatment census (10 to 15 days). Captured animals were exposed to a source of carbon dioxide (CO₂) for death. *Rattus rattus*, followed by *R. norvegicus* and *M. Musculus* were captured in the Autumn/Winter and Spring/Summer periods. More females were captured in the Spring/Summer, and younger animals were captured in the Autumn/Winter. Comparative results for pre- and post-chemical treatments, using McNemar's test ($P = 0.034$) show a significant difference in the Autumn/Winter period, indicating that less rodents were collected after treatment. In the Spring/Summer period there was no significant difference in the numbers of captured rodents ($P = 1.000$). Out of the 16 analyzed rodents, three were infested with *Laelaps (Echinolaelaps) echidninus*. In these three rodents, 1, 3 and 14 specimens of mites were found. Only one animal was infested with *Ctenocephalides felis felis*. Both ectoparasites were collected on *R. rattus*. The remaining animals did not show any other ectoparasites. None of the 16 blood serum samples from the animals in this study reacted to any of the 22 serovars of *Leptospira* spp. With regard to isolation in selected medium, two samples were suspicious for *Leptospira* and one sample (*R. rattus*) confirmed to be positive for *Leptospira* spp. in the PCR. Histopathological analysis was conducted in only 13 rodents. Several *Capillaria hepatica* eggs were found in the hepatocyte, in 53.84% (7/13) of the parasited individuals.

Key Words Anticoagulant Rodenticide, Live Capture, *Leptospira* spp, *Capilaria*, *Ctenocephalides felis felis*, *Echinolaelaps echidninus*