Health, zoonotic pathogens and parasites

The presence of tularemia (*Francisella tularensis*) in *Apodemus* sp. in the Belgrade forest area

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Tularemia, zoonosis caused by *Francisella tularensis*, is considered endemic to the Balkan Peninsula. Main reservoirs of the disease are rodents, which usually show no clinical signs and are a potential disease source for other animals and humans. We investigated the presence of *Francisella tularensis* in *Apodemus* sp. The capture of individuals of field rodents was carried out at the edge of the forest, near the promenade or places for recreation in the Belgrade area. A total of 96 small field rodents were collected during the autumn 2023 in three forested regions. Tissue samples were taken and pooled samples were prepared for all tested animals (71 *A. agrarius*, 13 *A. flavicolis*, 12 *A. sylvaticus*). *F. tularensis* was detected by PCR, using primers TUL4-435 and TUL4-863. 13 samples tested positive on PCR while 7 of those have been proven to belong to *F. tularensis* subsp. *holartica* by sequencing. *F. tularensis* was detected in animals in all three areas. All positive individuals belong to *A. agrarius*. It was concluded that *F. tularensis* is present in wood mice in the Belgrade region.

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