

## Detection of *Rickettsia* spp. in ticks from different species of migrating passerine birds in Lithuania

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Birds play an important role in the global dispersal of tick-borne pathogens. During migration, they spread ticks within and between continents. Tick-borne rickettsiae are considered to be emerging, but there is still a lack of data on the occurrence and prevalence of the spotted fever group (SFG) rickettsiae across Europe, especially in the Baltic countries. The aim of this study was to investigate the presence of *Rickettsia* spp. in ticks from migrating passerine birds. Birds were trapped and examined for the presence of ticks at Ventės Ragas ornithological station, situated in the northwest of Lithuania, during 2013 and 2014. In total, 237 ticks (95 larvae and 142 nymphs) were removed from 91 birds of 15 different species. All ticks were identified as *Ixodes ricinus*. Twenty-three out of 91 infested (25.3%) birds carried *Ixodes ricinus* ticks infected with *Rickettsia* spp. DNA was detected in 11.4 % of the tick samples. In total, 6.3% of larvae (6/95) and 14.8% of nymphs (21/142) were positive. *Erithacus rubecula* was the species of birds with the largest number of infected ticks.

This study represents the first investigation of *Rickettsia* spp. from ticks collected from migrating birds.