

TRICHINELLA SPECIES VARIETY IN PINE MARTEN (*MARTES MARTES*) AND STONE MARTEN (*MARTES FOINA*) IN LATVIA AND LITHUANIA (KAUNAS REGION)

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INTRODUCTION. *Trichinella* species are worldwide distributed zoonotic agents and carnivores, as pine marten and stone marten, are common wildlife reservoirs for this nematode. In wild and domestic animals from Latvia and Lithuania detected *Trichinella britovi*, *T. nativa*, *T. spiralis* and *T. pseudospiralis*. Aim of this study was to obtain the *Trichinella* species prevalence and diversity in stone and pine martens in Latvia and Lithuania.

MATERIALS AND METHODS. Samples collected in hunting seasons from 2011 till 2014 in different regions of Latvia and in Kaunas region, Lithuania. Animals were killed by licensed hunters accordingly to Latvian hunting law (MK rules No 760) and Lithuania hunting law (LR MEDŽIOKLĒS ĪSTATYMAS Nr. IX-966). From each sampled animal (n=142) collected muscle tissues from foreleg and stored frozen at -20° C until further analyzing. *Trichinella* larvae detection was conducted separately for each animal. At least 25 g muscle tissue was analyzed according to European Union Commission Regulation with reference method (EC No 2075/2005). **The number of *Trichinella* larvae per gram of muscle tissues (l.p.g.) was determined and larvae were collected and stored in 96% ethyl alcohol for further analyses.** *Trichinella* species were identified by multiplex-polymerase chain reaction (PCR) using species specific primers.

RESULTS AND CONCLUSIONS. *Trichinella* sp. prevalence in *Martes* sp. is 48.6%: in Lithuania (Kaunas region) 20.0% but in Latvia 52.0%. In Latvia detected higher *Trichinella* sp. prevalence in *Martes* sp. than in Lithuania (Kaunas region). There is no difference in *Trichinella* sp. prevalence in pine marten (49.2%) and stone marten (45.8%) in Latvia and Lithuania (Kaunas region). *Trichinella* sp. intensity is higher in pine marten (0.04-49.88 l.p.g.) than in stone marten (0.04-17.92 l.p.g.).

In *Trichinella* identification determined three species: *T. britovi*, *T. nativa* and *T. spiralis*. There is higher *Trichinella* sp. diversity in Latvia than in Lithuania (Kaunas region). *Trichinella nativa* is only common in mix invasion with *T. britovi*. The widespread species in Latvia and Lithuania (Kaunas region) is *T. britovi*.