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Trichinella britovi biomass in naturally infected pine martens (*Martes martes*) of Latvia

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Highlights

- Estimation of *Trichinella* larva biomass in a naturally infected host population
- The number of larvae per gram of a muscle is representative of the total biomass
- Total larval burden and larvae/g coefficients were established for the pine marten

Abstract

Parasites of the genus *Trichinella* are cosmopolitan nematodes infecting primarily wild animals, which represent the main reservoirs of these zoonotic pathogens. To investigate the transmission patterns of *Trichinella* spp. from wild to domestic animals and to humans and for the risk assessment of these parasites in a geographical area, it is important to know the number of possible transmission events deriving from carcasses of infected hosts. For this purpose, the evaluation of the larval biomass in reservoir hosts is needed. No data is available on how to estimate the biomass of *Trichinella* spp. larvae in muscles of naturally infected animals. The aim of this study was to evaluate the larval biomass in naturally infected pine martens (*Martes martes*) of Latvia, in which the prevalence of *Trichinella britovi* infection was over 50%. Single muscles or group of muscles (abdomen, back, diaphragm, intercostal muscles, muscles from the head, left and