

Spatial distribution of of *Trichinella* spp. in domestic pigs and wild boars in Poland (2016–2020)

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Trichinellosis is a zoonotic meat-borne disease caused by the nematodes of the genus *Trichinella*. Humans and animals may be infected by eating muscle tissue contaminated with live larvae of

Trichinella spp. The most common source of human infection is the meat of domestic pig and wild boar. The goal of the study was an investigation of occurrences and geographical distribution of

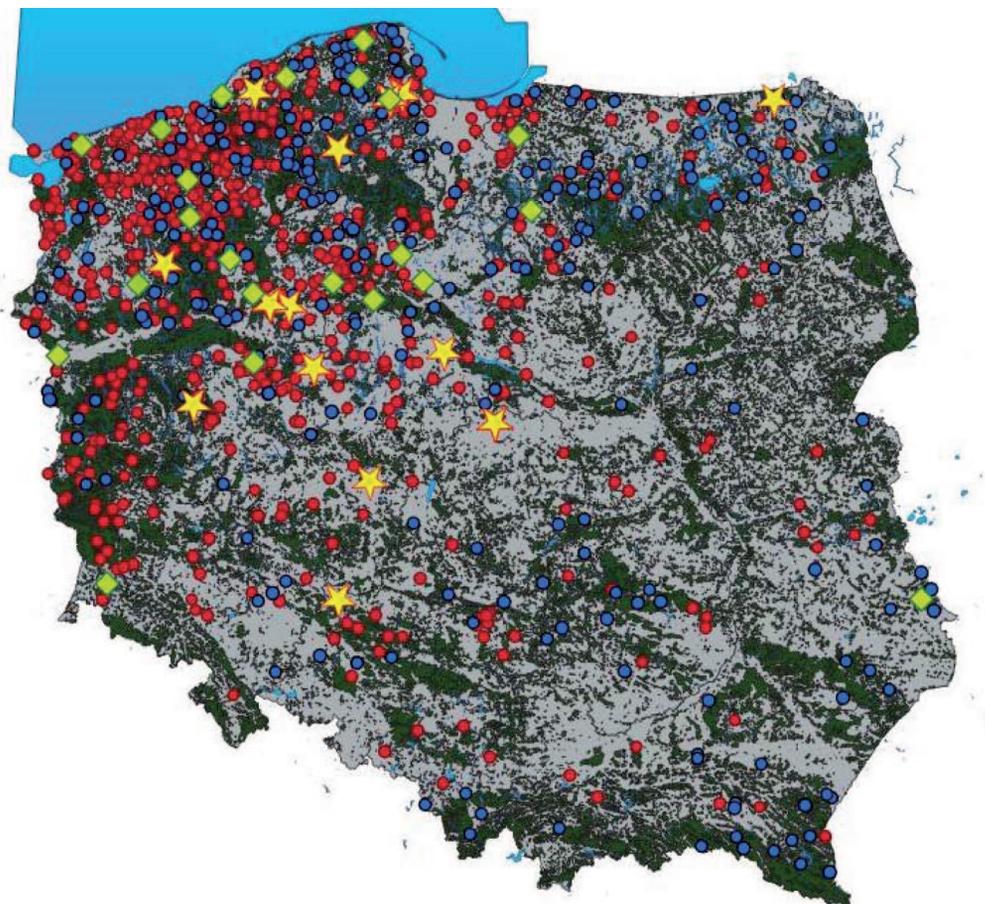


Figure 1. Geographical distribution of *Trichinella* species occurs in wild boars and domestic pigs in Poland in the years 2016–2020. Red points are *Trichinella spiralis*, blue points are *Trichinella britovi*, while green diamonds are mixed *T. spiralis* and *T. britovi* cases in wild boars. The stars are *T. spiralis* cases in domestic pigs

Trichinella spp. infections of wild boars and domestic pigs in Poland in the years 2016–2020. Preferential muscle tissues of domestic pigs and wild boars were investigated by the digestion method and subsequently detected *Trichinella* spp. larvae were identified at the species level by multiplex PCR. Detected and genetically identified infection cases were geographically mapped using QGIS software. A total of 89,341,610 domestic pigs and 1,080,412 wild boars were tested. We identified 81 *Trichinella spiralis*-positive cases of pigs. In

wild boars, 930, 300, and 22 cases of *T. spiralis*, *Trichinella britovi*, and mixed *T. spiralis/T. britovi* infections were found consequently. As shown in Figure 1, all *Trichinella*-infected domestic pigs and the majority of infected wild boars were detected in the north and west of the country. In conclusion, Poland is considered an endemic country for *Trichinella* spp. however, farms located in the South-East part of Poland may apply for *Trichinella* freeholdings certification.