

Thelazia callipaeda in Poland – the current state of knowledge

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Thelazia callipaeda is a zoonotic nematode which locates in the conjunctival sac of carnivores, mainly foxes. *T. callipaeda* expansion in Europe began in Italy in 1989 and gradually extended to other countries in the south and west of Europe. The first case of *Thelazia callipaeda* infection in Poland was recorded in 2018, and was described a year later during the 25th Congress of the Polish Parasitological Society in Warsaw. During the next two years, *T. callipaeda* infection was found in seven dogs and one cat in Poland.

The material was adult nematodes specimens obtained from domestic animals. Nematodes were fixed in 70% ethanol and photographed. DNA isolation was performed using a commercial kit. The obtained DNA was used to amplify a 446 bp fragment from mitochondrial cytochrome oxidase

(mt-CO1) with primers JB3: 5'-TTTTTGGGCAT CCTGAGGTTTAT-3' and JB4.5: 5'-TAAAGAAA GAACATAATGAAA-ATG-3' (1993). The amplification products were sequenced and then compared to the sequences deposited with GenBank®.

All sequences were consistent in 99.8–100% with the *T. callipaeda* haplotype 1) sequences deposited with GenBank®.

Increased tourist traffic contributes to the spread of new parasite species infections. Numerous cases of carrying *T. callipaeda* to Poland suggest the need to increase the vigilance of veterinarians during the routine clinical examination of dogs and cats. It also seems important to change the requirements for the use of antiparasitic preparations in animals traveling outside Poland.