

New findings of *Setaria tundra* and *Setaria cervi* in the red deer (*Cervus elaphus*) in Poland

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Our study aimed at examining the phylogenetic position of the newly-found *Setaria* nematodes obtained from the red deer (*Cervus elaphus*) specimen culled close to Opole city and Szczędrzyk village, near Turawskie Lake (SW Poland, 50°41'39.5"N 18°05'38.8"E). Phylogenetic position was based on sequences of the mitochondrial cytochrome *c* oxidase subunit 1 (COX-1). Alignment and phylogenetic analyses, as well as SEM microscopic analysis, revealed the presence of two *Setaria* species: *S. cervi* and *S. tundra*. *Setaria tundra* was noted in only one individual, a calf of the red deer, while *S. cervi* was observed in three stags, two hinds and one calf of the red deer. According to our knowledge, it is the first case of *S. cervi* in the red deer in Poland confirmed in molecular studies and also the first case of *S. tundra* infection in the red deer. The key findings of our study were:

Setaria tundra is confirmed for the first time to infect the red deer (*Cervus elaphus*). *Setaria cervi* is reported in the red deer for the first time in Poland with molecular data support.

73% of examined specimens of the red deer were infested with *Setaria* worms.