



AIR SACS TREMATODIASIS AND RELATED PATHOLOGY IN TWO COMMON BLACKBIRDS (*Turdus merula*)

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Air sacs trematodiasis is rarely reported in birds. Necropsy of two free-ranging common blackbirds (*Turdus merula*), found dead in central Italy, revealed the presence of a large number of flukes in the coelomatic cavity. Histologically air sac walls were covered with a mild fibrinous exudate containing degenerate heterophils, fibrin, some bacterial colonies (gram-positive cocci), and trematodes. The superficial bronchi and parabronchi were markedly distended with mucoid material containing bacterial colonies, and the adjacent pulmonary parenchyma was congested and collapsed. Large numbers of trematodes, surrounded by a mild to moderate suppurative to pyogranulomatous inflammatory reaction, were observed on the intestinal, pericardial, and hepatic serosal surfaces. The parasite number and bacterial bronchopneumonia, aerosacculitis, and serositis were of sufficient intensity to have resulted in death of these birds. At microscopical examination, flukes showed a tongue-shaped elongate body of 2,088-2,314 μm in width and 8,268 -11,830 μm in length, tapered anteriorly and rounded at the posterior end. The mouth was slightly oval and sub-terminal with a weakly developed oral sucker. The oval and well developed pharynx measured 250-309 μm and the two caeca joined posteriorly. Two large (550-702 μm x 450-520 μm), globular testes were situated obliquely to each other, while the intertesticular ovalar (250 x 300 μm) or round (about 334 μm) ovary was placed in a longitudinal straight line with the testes. The ootype was about 110 μm in diameter, while the brown-yellow eggs measured 131.52 x 73.86 μm in mean. The genital pore was post-pharyngeal, while the vitelline glands were arranged symmetrically and were not confluent posteriorly. For morphology and dimensions, the species here examined was identified with *Morishitium (Cyclocoelum) polonicum* as described by Machalska (1980) in *T. merula* (1,2). This fluke species typically inhabits the air sacs of blackbirds and in its life cycle terrestrial snails are intermediate hosts. In Italy, this species was previously reported in *T. merula* from an area neighboring that where the blackbird here examined lived (3). Dimensions and morphology of the species reported by Visconti (1988) are similar to that of the species here examined. In our knowledge, this is the first description of pathological lesions caused by *M. polonicum* in *Turdus merula*.

[1] Machalska J. *Cyclocoelum polonicum* sp.n. (*Trematoda, Cyclocoelidae*) from the Thrushes *Turdus Philomelos* Br. and *T. Merula* L. Acta Parasitologica Polonica XXVI (16): 129-136, 1980. [2] Dronen NO, Charles KB. Updated keys to the genera in the subfamilies of *Cyclocoelidae* Stossich, 1902, including a reconsideration of species assignments, species keys and the proposal of a new genus in *Szidatitreminae* Dronen, 2007. Zootaxa 4053 (1): 001–100, 2015. [3] Visconti S, Giovannetti L, Canestri-Trotti G. Su di un trematode del genere *Cyclocoelum* Brandes, 1892, parassita dei sacchi aerei di *Turdus merula* L. Parassitologia 30 (Suppl. 1): 211-212, 1988.