Stichorchis subtriquetrus as a common parasite of beavers indigenous to the Lublin region

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The European beaver (*Castor fiber*) is the largest rodent of Eurasia. In the nineteenth century, the population of this species was threatened with extinction in many European countries, but nowadays, the number of beavers is growing rapidly. The introduction of protection programs has resulted in the beaver becoming a common rodent in European wetlands.

Stichorchis subtriquetrus (Rudolphi 1814) belongs to the Paramphistomatidae family, a strictly specialized trematode of beavers, reported with a prevalence of 90–100%. S. subtriquetrus is mainly found in the caecum, and rarely in the large intestine. Its intermediate hosts are aquatic snails (Bythinia, Planorbis, Lymnaea). The body of the parasite is broadly rounded posteriorly and non-segmented. The oral and ventral suckers are large and have muscular walls. These parasites are hermaphrodites, with large, lobulated testes lying anterior to a small, spherical ovary. The eggs are oval, thin-walled, and completely filled with germ material. An operculum is present. The mean size of the eggs is 168×104 μm.

Parasitological examinations of ten European beavers from the Lublin region were performed between 2014 and 2015 following necropsy. The animals (seven female and three male) included nine individuals with body weights in the range 20–28 kg, and one of 14 kg. During parasitological examination, the contents and mucosal scrapes of the gastrointestinal tract were tested macroscopically and with the flotation and decantation method.

S. subtriquetrus trematodes were found in nine of the 10 examined animals. All helminthes were isolated from the contents of the intestine. They were localized mainly in the caecum, less in the colon. The intensity of infection ranged from five to 265 parasites. Coproscopical examination showed eggs of trematodes in fecal samples from five beavers.

S. subtriquetrus is a frequently reported parasite of beavers in many European countries. In Poland, the trematode was described as the most dangerous parasite of the genus Castor, causing severe inflammatory changes of the caecum and mortality of the host. The presence of this parasite is a result of the successful reintroduction of its definitive host and low specificity for its intermediate snail host.