MYXOBOLUS UNDULATUS SP. N., A NEW MYXOSPORIDIAN FROM MINNOWS *(PHOXINUS PHOXINUS)*

On examining the protozoan parasites of fresh-water fish from the territory of Czechoslovakia, we came across a new species of *Myxobolus* in minnows. It lacks an iodinophilous vacuole and, accordingly, would fit into the genus *Myxosoma* of the hitherto existing classificational scheme. In full agreement with WALLIKER (J. Protozool. 15: 571—575, 1968) however, we consider the genus *Myxosoma* Thélohan a junior synonym of the genus *Myxobolus* Bütschli and accordingly place our new species into the latter genus.

A thorough comparison with existing descriptions of other "*Myxosomas*", i.e., species lacking iodinophilous vacuole, failed to reveal any relation of this species to any other known species. However, it was found at a time before we started to study the myxosporidians consistently by means of photomicrography so that only the drawn illustration of this species is available. Also the number and exact shape of the coiled polar filament was not studied in detail at that time. Therefore the species proposed below as a new one is pending a further re-study by means of techniques employed in the preceding paper (LOM J., Folia parasit. (Praha) 16: 97—103, 1969).

Myxobolus undulatus sp. n.

Infected *Phoxinus phoxinus* came from several localities in the Šumava mountains in south-west Bohemia, Czechoslovakia. Vegetative stages are found in fine gill platelets in the shape of small (0.1 mm) oval cysts. Cysts contained mass of egg-shaped spores, 9—10.5 by 7—8.5 μ in size, about 5—6 μ in thickness. The average dimensions of polar capsules are 5.5 by 2.2 μ. The shell is rather thin, smooth, bears no sutural markings, and there is no intercapsular appendix at all. At the posterior end, the suture of both valves is thickened in the form of shallow undulations. Drop-like polar capsules converge with their anterior ends, their posterior ends reach beyond half of the length of the spore. There is no mucous envelope; the sporoplasm with two nuclei contains no traces of iodinophilous vacuole.

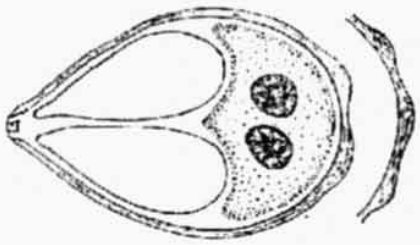

Fig. 1. Front view of *Myxobolus undulatus* sp. n.

A thinner shell, a more slender shape, absence of intercapsular appendix and of iodinophilous vacuole differentiate this species clearly from *Myxobolus lomi* Donec and Kulakovskaya, 1962. Also its shape and presence of sutural structures on the posterior end of the spore separate it from other *Myxosoma* (= *Myxobolus*) species, and there are only some remote resemblances to *Myxosoma phoxinacea* Bauer 1948, described from fixed specimens of *Phoxinus percum*.

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