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## Molecular and histopathological data on *Myxobolus muelleri* in *Squalius cephalus* from the northeast Turkey

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**M**yxosporean parasites have a significant role as pathogens of fish in wild and cultured stocks throughout the world. There are a few reports of *Myxobolus* species in freshwater fish in Turkey. The present study is part of an ongoing investigation into the characteristics of myxosporean parasites of freshwater fish in northeast Turkey. Thirty freshly caught specimens of the *Squalius cephalus* were purchased from fishermen at Ladik Lake, Samsun, Turkey between August 2015 and October 2015. All organs were also examined for plasmodia of myxosporean parasites under a stereo microscope. The plasmodia type of gill-infecting species was classified lamellar, filamental, and gill arch type. Infected gills were fixed in 10% neutral formaldehyde and routinely processed,

embedded in paraffin. Tissue sections 4–6  $\mu$  in width were stained with hematoxylin-eosin and examined a light microscope. The histological analysis revealed the development of the cyst-like plasmodia as intrafilamental-vascular type. Plasmodia based on SSU rRNA gene was amplified and sequenced at Macrogen. The sequence was compared with previously published data for identification by using BLAST via Genbank. *Myxobolus* infection was found in 5 (16.6%) of 30 *S. cephalus*. Molecular analysis of the SSU rRNA gene confirmed the myxosporean species as a *Myxobolus muelleri*. This is first report of histopathological and molecular data of *Myxobolus muelleri* in *S. cephalus* from Ladik Lake, Turkey to date.

### Biography

Banu Yardimci has earned the PhD degree with the topic entitled “Pathological Findings in Nile Tilapia (*Oreochromis niloticus*) Experimentally Infected by *Aeromonas hydrophila* (Bacterial *Haemorrhagic Septicaemia*)” in 2007. She joined as an assistant professor at the Ondokuz Mayıs University Faculty of Veterinary Medicine in 2008 and promoted to associate professor in 2015. She has presented many scientific studies in various national and international congresses and symposiums. She is a delegate of Association of Turkish Veterinary Pathology.

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