

Evidence of ichthyophthiriasis in cultured *Acipenser stellatus* (Pallas 1771)

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Abstract

Although there is an old concern about sturgeon parasite research, few studies have delved into the histological changes produced by them on host organs. Gills, vital organs for the exchange of gases but also of ions, are targets for certain categories of ectoparasites.

During the histopathological analysis of gills in cultured *Acipenser stellatus* (stellate sturgeon), we identified the presence of *Ichthyophthirius multifiliis*, the causative agent of 'white-spot' in fresh-water fish. The species was identified histologically, without any exterior (skin) sign of disease. Different life cycle stages of *Ichthyophthirius multifiliis* were observed. Branchial changes as hypertrophy and proliferation of chloride and mucous cells were seen. To make a definitive diagnosis of ichthyophthiriasis, it is necessary to microscopically examine tissue from a gill, caudal fin or the body surface..

Keywords: stellate sturgeon, gill, *Ichthyophthirius multifiliis*, histopathology.

Introduction

Some of the most frequently encountered ectoparasites of fish are species of ciliates and of these the most important is the holotrich *Ichthyophthirius*