



## Seasonality infestation of *Marteilia* spp in mussels (*Mytilus galloprovincialis*) cultivated in sea areas of Albania<sup>#</sup>

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**Abstract:** Marteiliosis is a disease of molluscs caused by protistan parasites of the genus *Marteilia*, phylum Paramyxea. Mollusc species susceptible to *Marteilia* spp. are European flat oyster (*Ostrea edulis*), the blue mussel (*Mytilus edulis*) and the Mediterranean mussel (*M. galloprovincialis*). Marteiliosis caused by *Marteilia refrigens* is known as one of the mussels diseases listed by OIE. Monitoring of this infection in mollusc culture in Albania has been one of the recommendations of EU focusing on export of mussels in EU market for human consumption or used for aquaculture *Mytilus galloprovincialis* is sensible to this disease and was the investigated specie in this study. The 2 shellfish farms included in the study are located on the *Butrint Lagoon* and on the *Gulf of Shengjin* (first report of this disease in Albania). Both farms cultivate mussels with the production system known as overhanging cemented panels, with ropes of 2.5 m. In mussels, marteiliosis infection is related to climatic changes, production zone conditions, pollution levels, water movement and temperature, geographic conditions and other unknown factors. During this study, samples of *Mytilus galloprovincialis* were collected in summer (6 June). Researches carried out on the *Butrint Lagoon*, from 2004 to 2010, were found positive for the presence of *Marteilia* spp. (0.8-23%), from sampling kept in april-september. From analytical procedures performed with two methods: cytological and histological methods were controlled 150 samples for each station monitorated of *Mytilus galloprovincialis* collected in *Butrint Lagoon* and *Gulf of Shengjin*. Sample has been considered live *Mytilus galloprovincialis*. In conclusion, considering our study of marteiliosis in Albania we confirm that this protistan parasite is present in specie of *Mytilus galloprovincialis* in *Butrint Lagoon* (0.83%) and *Gulf of Shengjin* (5.8%) and the seasonality of *Marteilia* spp. should be considered because of the rate of invasion change in different months of the year.

**Key words:** *Marteilia* spp, *Mytilus galloprovincialis*, *Lagoon of Butrinti*, *Gulf of Shengjin*

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