

## **Review of the master thesis by the supervisor**

**Title: Comparison of the genetic variability of geographically distant populations of selected species of European marine gobies**

**Student: Katarína Chalupecká**

The aims of the thesis were to compare genetic diversity of geographically distant populations of eight species of gobies, based on multilocus approach, and to reveal whether there is a population subdivision and thus indication of the existence of biogeographical barrier(s) for the studied species. The sampling localities represented well the known distribution of studied species. The collection of the material is not easy, it includes individual collection of each specimen by applying scuba diving and the use of anaesthetic and hand nets. Especially in case of cryptobenthic species, the collection is very difficult, as fish are hidden, and one spreads the anaesthetic blindly. One mitochondrial and an intron of one nuclear marker were used and 350 specimens were analysed.

Katarína participated in all steps of the work, she participated in the collection of the material, analysed the material and conducted the analyses of the data.

The aims of the thesis were fulfilled and Katarína obtained interesting results, which opened new topics for her PhD and made a decent base for publications. The results showed that there is no clear subdivision of the populations of the studied species and revealed the existence of a hidden diversity within two species of cryptobenthic gobies.

The work is written in English and is written very well. There are not many typos, vague or wrong statements, or formal mistakes. My main criticism of the thesis is that such interesting results would deserve somewhat deeper discussion.

Overall the thesis is very good and I recommend it for the defence.

Prague, September 5<sup>th</sup>, 2018

Jasna Vukić

supervisor