

Radula morphology of trochid gastropods and its systematic value

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The genus *Gibbula* has long been a matter of discussion. The current situation is that there are only a few species staying in *Gibbula* and the remaining species are separated into *Steromphala* and *Phorcus*. There are around 20 species in the mediterranean sea. They live on rocky shores and graze of biofilm. There is a high variability within the species themselves. There are only vague original descriptions, which led to a varying identification literature. Therefore the snails are often difficult to categorise by their shell morphology and because of that DNA barcoding is necessary.

The main goal of this diploma thesis is to examine, if there are differences in the radula morphology between the genera *Steromphala* and *Phorcus*.

The radula has been frequently investigated because of its importance as a tool in systematics to diagnose the species. It has also been recognized as an important morphological criterion for the taxonomic allocation of species. It shows general similarities at family and generic levels with consistent differences at the species level. The *Gibbula* species have a rhipidoglossan radula type. Each row consists of a large central tooth and, on each side, five laterals and a fan of many slender marginals.

The snails were collected in Croatia on a few sites around Rovinj. Pictures of the radula are taken with the scanning electron microscope and the lightmicroscope.