

POLYMORPHIC FORMS OF CALCIUM CARBONATE ON THE SURFACE OF *ULVA* THALLI (CHLOROPHYTA) RECORDED IN FRESHWATERS

Summary

Process of calcification, which is the formation of calcite — a pure calcium carbonate mineral, commonly takes place among both marine and freshwater algae. The available literature referring to inland waters provides a lot of information about calcareous macroalgae, mainly on extensively encrusted species of *Chara*, called stoneworts. In addition to this group, where CaCO_3 may provide 60% of dry weight, also freshwater green alga *Ulva* is prone to CaCO_3 precipitation (up to 50% of dry weight).

Freshwater *Ulva* exhibit an extracellular calcification mode and the deposits form bands on the surface of a thallus. Owing to a large number of calcite crystals the surface is quite coarse. Microscopic observations demonstrated differences in the size and shape of crystals and divided them into two morphology types of CaCO_3 microcrystals: calcite rhombohedrons and aragonite needles. The percentage of CaCO_3 in the thalli was about 50% of dry weight.