ABSTRACT

The thesis deals with the options of approach to teaching leaf morphology at lower secondary schools from both theoretical and empirical point of view. The empirical part is then verified on-site within the teaching process.

The theoretical part is dedicated to the topic of leaf and particular aspects of the teaching process.

The empirical part at first attempts to conduct a survey of the methods and organization forms of teaching applied at particular lower secondary schools within the teaching of leaf morphology. Afterwards, it analyses selected textbooks used for teaching biology. Next part describes suggested methods and organization forms of teaching applied less frequently during the education. The second goal of the thesis is to put in practice the methods and organization forms of teaching within an educational experiment. Afterwards, a didactic test is used at representative schools to verify the efficiency.

At the end of the thesis, the results of the following are presented: the observation of teaching leaf morphology, the analysis of the biology textbooks content, and the didactic test. The results of the didactic test demonstrate the extent to which the skills and knowledge of the students are effected by the methods and organization forms of teaching applied within the educational experiment at representative lower secondary schools. The IT method proves to develop the cognitive targets the best. The affective targets are best developed within the organization form of excursion. This form of education is proved as well to present the best results of the psychomotor targets performance.