

Abstract

The genus *Sorbus* is a very complicated group. Thanks to mikroevolutionary processes such as interspecific hybridization, polyploidy and apomixis produce large quantities of genetically distinct lineages. Hybridization between basic species (*S. aria* agg., *S. torminalis*, *S. aucuparia*, *S. chamaemespilus*) formed hybridogenous group which speciation is often associated with just polyploidy and apomixis formation, often only optional. Another type of reproduction is observed vegetative layering. The whole group is mophological very variable and taxonomic categorization of certain groups is not solved yet. The work also includes an introduction to the group *Sorbus sudetica* agg., which representative *S. sudetica* is endemic to Giant Mountains. At the end there are the current results and the methods that will be used for the master's thesis.