

Abstract

This is a review of previously published articles and studies on the *Galium mollugo* complex in Central Europe. Its aim is a brief introduction to the morphology and classification of the genus *Galium* L., especially the group *Galium mollugo* within Central Europe. The evolutionary processes (hybridization, polyploidization and allopatric speciation) responsible for differentiation within this group are described. Delimitation of taxa and their identification are difficult and require additional studies. The methods that will be used in my diploma thesis (flow cytometry and classical morphometry) are introduced. The potential of use of molecular methods are also mentioned.

Key words: *Galium mollugo* group, morphology, FCM, taxonomy, hybridization