

Abstrakt

This thesis summarizes the documented information on the distribution of *Cardamine dentata* Schult. of the family *Brassicaceae* in the Czech Republic; it deals with the chromosome numbers and with ploidy levels of this species. Microsatellite markers were used to evaluate the potential relationships of *C. dentata* with other species of the group *C. pratensis*.

Using a revision of available herbarium material it was found that the optimal conditions for the occurrence of *C. dentata* in the Czech Republic are in the phytogeographical regions of Thermophyticum and Mezophyticum at altitudes of 150–650 m a.s.l.

No karyological data on this species were previously published from the area of the Czech Republic; using the flow cytometry and chromosomes counting it was revealed that in the area of the Czech Republic, populations with decaploid and undecaploid levels of ploidy occur.

With help of microsatellite markers, it was confirmed that plants of *C. dentata* are genetically different from the other species of the *C. pratensis* group.

Keywords: *Cardamine*, *Cruciferae*, microsatellite markers, chromosome numbers, geographical distribution, Czech Republic