

## Summary

PhD thesis presents taxonomic evaluation of morphological characters to identify taxa within the studied species complexes and assesses genetic diversity of *Allium ursinum* in Poland. Moreover, the distribution ranges of particular taxa in Poland were determined. Multivariate statistical methods were used for the analysis of morphological characters. Molecular analysis, based on 3 ISSR markers, was carried out on individuals collected from 9 population of *A. ursinum*. The most diagnostically important morphological characters in *Anthyllis vulneraria* complex are: calyx length, number of rosette leaves, stem hairiness, distances between stem leaves, inflorescence length. The species within *Senecio nemorensis* agg. mainly differ in the indumentum and length of supplementary bract, leaf base width, the supplementary/involucral bract length ratio and ligule length. Whereas, the subspecies of *A. ursinum* differ only in the morphology of pedicels. The intermediate morphotypes were found within the studied groups. Their occurrence is limited to the areas where the distribution ranges of parental taxa overlap. There was a significant correlation between genetic differentiation and geographical distance of *A. ursinum* populations, within which three genetic groups were found. Two of them correspond to two subspecies, while the third one has the largest share in the intermediate populations. The emergence of the third genotype is an effect of hybridization events occurring within the secondary contact zone of two migration waves of *A. ursinum* to the area of Poland.