

**P0659. *Allium oleraceum* L. polyploid complex in the Czech Republic: geographical and ecological pattern**

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*Allium oleraceum* L. represents polyploid complex ( $2n = 3x-6x$ ) of common European geophytes, probably of allopolyploid origin. We examined the population frequencies and distribution of cytotypes in the area of the Czech Republic. Ploidy was inferred from estimates of DNA contents, using flow cytometry, for 4347 plants sampled from 327 populations. We further tested for habitat differentiation among cytotypes by comparing many environmental variables of their respective habitats. Across the entire sampling area, pentaploids were most abundant (53% of individuals) while hexaploids and tetraploids were least abundant (33% and 14%, respectively). We did not find any triploid plant. Most populations contained only one cytotype (77%), 24% contained two and 1% had a three cytotypes. Populations with two cytotypes occurred in all possible cytotype combinations. We found significant differences in geographical pattern among cytotypes. Tetraploids and hexaploids showed partially vicariant pattern of distribution while pentaploids were distributed evenly over the whole study area. The results provide evidence for habitat differentiation among cytotypes.