Morfološka in genetska variabilnost osočnikov (*Salicornia* L.) v Tržaškem zalivu (Severni jadran)

Morphologic and genetic variability of glassworts (*Salicornia* L.) from the Gulf of Trieste (Northern Adriatic)

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The morphologic and genetic variability of annual glassworts were studied. Four predetermined morphotypes of *Salicorna* (*S. patula, S. emerici, S. veneta* and the "saline type") from 10 locations of the Gulf of Trieste coasts were studied. Beside morphometry, genetic variability was detected by means of ploidy level estimation using flow cytometry and with molecular DNA analysis of ITS regions of nrDNA and cpDNA. Two groups, diploids and tetraploids, which match with same nrDNA sequence, were recognized. Two types of cpDNA emerged among diploids, one of it - as a consequence of mutation before polyploidization - appear in all the three tetraploid morphotypes. In our case hybridization indicates tetraploid maternal progenitors, providing a plastid genome. The morphometry, based on regenerative traits, separated the four morphotypes, but the three most important characters in floral region (length of the fertile segment (LFS), length of the lateral flower (LLF), width of the scarious margin of the fertile segment (SM)) match with two genetically recognized taxa: diploid *S. patula* and widely distributed tetraploid, *S. emerici,* comprising also endemic morphotype *S. veneta* and the "saline type". The determination key is given. It showed up, that the tetraploid *S. emerici* is far most common species of annual glassworths in the area, occupying more extreme habitats than *S. patula*, mostly forming monodominate stands. We estimate that in Slovenian seacoast around 95% of the glassworts belong to *S. emerici.* We discuss the habitual variability between tetraploids, being not more than phenotypic plasticity, by salinity-moisture-nutrients gradient and tidal regime. Further study in order to reconsider and revise the taxonomical status of endemic *S. veneta* is proposed.