

Phylogeny and biogeography of *Euphorbia saxatilis* and allied taxa (Euphorbiaceae)

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Euphorbia is one of the largest genera of seed plants with mostly tropical distribution. Around 100 species are native to Europe (*Euphorbia* subgenus *Esula*), with the highest diversity in Southern Europe. The *Euphorbia saxatilis-triflora-keneri-herzegovina* complex is disjunctly distributed in the Northeastern and Southeastern Alps and the Dinaric Mountains. *E. saxatilis* JACQ. is endemic to the Northeastern Calcareous Alps of Austria, whereas the three others grow in the Southeastern Calcareous Alps and the Dinaric mountains (*E. triflora* SCHOTT, NYM. & KY. on Čaven in Slovenia and on Velebit and Gorski Kotar in Croatia, *E. keneri* HUTER on the southern outskirts of the Carnic Alps and the southwestern outskirts of the Julian Alps, and *E. herzegovina* G. BECK in the Dinaric Mountains from Bosnia and Herzegovina to Montenegro). The aim of our study was to test the hypotheses on the relationships among the taxa based on morphological studies, as well as to infer the phylogenetic position of the group within *Euphorbia*, using AFLP and DNA sequences, respectively. AFLP data suggest that *E. herzegovina* is most closely related to *E. saxatilis*. *Euphorbia keneri* and *E. triflora* form distinct clades and should be treated as independent species (and not as subspecies). *Euphorbia herzegovina* subsp. *javoriensis* (RITTER-STUDENICKA) TRINAJSTIC is clearly nested within *E. triflora*. The close relationship to *E. barrelieri* SAVI suggested on the basis of morphological characters is supported by nuclear ribosomal ITS sequences as well as plastid sequences. The next closest relative is *E. nicaeensis* ALL., whereas the relationships with other groups of *Euphorbia* subg. *Esula* are poorly resolved.

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