Patterns of Isoeto-Nanojuncetea communities in Iberian Peninsula and Macaronesia

S. Ribeiro¹, V. Silva¹, C. Pinto-Cruz², J. C. Costa¹, D. Espírito-Santo¹, J. A. Molina³

1 Centro de Botânica Aplicada à Agricultura, instituto Superior de Agronomia, Tapada da Ajuda, 1349-017 Lisboa, Portugal silvia.sbenedita@gmail.com

- 2 Departamento de Biologia, Universidade de Évora, Apartado 94, 7002-664 Évora, Portugal
- 3 Department of Plant Biology II, Complutense University of Madrid, E-20040 Madrid, Spain

To present a comprehensive revision of Isoteo-Nanojencetea class in Iberian Peninsula (Iberian Peninsula, Madeira and Azores c.a. 600000Km2), classified plant communities were assign to the habitats Directive and identify the indicator plant species for each community were classified. Vegetation sampling was conducted in seasonal wetlands. Grassland communities were surveyed in homogenous quadrats and each taxon's absolute percent cover was recorded. Plant community types were recognized with Hierarchical Cluster Analysis and subsequently a Similarity Analysis (ANOSIM) was used to test for significant differences in plant community composition. An indicator species analysis is used to find significant indicator species responsible for differences between temporary ponds grasslands types. To test the consistency of indicator species analysis, diagnostic species are also determined by fidelity that was assessed by the coefficient Phi. Our data set was complemented with relevés included on SIVIM - Iberian and Macaronesian Vegetation Information System and BIOVEG - Vegetation-Plot database of the University of the Basque Country within Iberian Peninsula seasonal wetlands. Our work classifies those community types, in putative associations or alliances within the Isoeto-Nanojuncetea class using floristic information. Almost all of these communities has correspondence with the 3120, 3130 and the priority habitats for conservation 3170° of the European Union Habitats Directive. Indicator species represent a practical way of discriminating between different plant communities and habitat types. An unequivocal identification of habitat type is important so that management and conservation measures can be defined accordingly.