Floristic patterns in *Isoeto-Nanojuncetea* communities on the Iberian Peninsula

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Abstract

Temporary ponds are amongst the protected habitats in Europe being classified as priority habitat of Directive 92/43/EC (Habitats Directive). They include many communities of *Isoeto-Nanojuncetea*. To present a comprehensive revision of this class for the Iberian Peninsula, classified plant communities from several regions were assigned to the EU-habitats Directive. Vegetation sampling was conducted in seasonal wetlands. The ephemeral communities were surveyed in homogenous quadrats and each taxon's absolute percent cover was recorded. Plant community types were analysed with the TWINSPAN algorithm and the phytosociological approach. An indicator species analysis is used to find diagnostic species significant for differences between temporary ponds. To test the consistency of the indicator species analysis, the diagnostic species are also determined by fidelity that was assessed by the coefficient *Phi*. Our data set was complemented with relevés provided bySIVIM - Iberian and Macaronesian Vegetation Information System and by BIOVEG - Vegetation-Plot database of the University of the Basque Country within Iberian Peninsula seasonal wetlands. Our study classifies the community types - in putative associations or alliances - within the *Isoeto-Nanojuncetea* class using floristic information. Plant communitiesof temporary or very shallow waters, taken as a group, are rich in species and in community types. Almost all these communities correspond tohabitats 3120 and 3130 respectively the priority habitat for conservation 3170* of the EU Habitat Directive. The indicator species approach represents a practical way of discriminating between different plant communities and habitat types. This approach allows an unequivocal identification of habitat types by their floristic composition and is important for management and conservation measures.