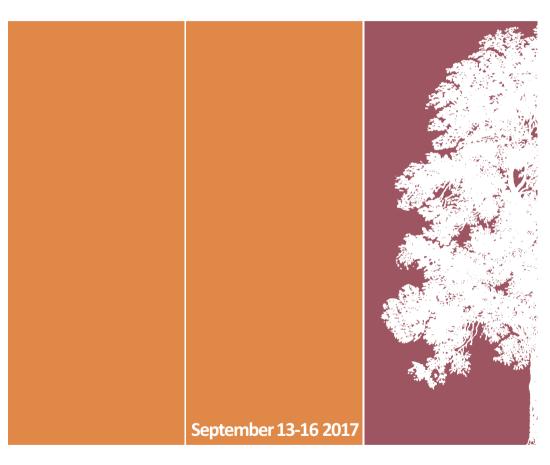
Abstracts



26th Congress of the European Vegetation Survey, Bilbao





26th Congress of the European Vegetation Survey

Scientific topic

Diversity patterns across communities in the frame of global change: conservation challenges

Bilbao, 13-16 September 2017

The Plenary Sessions and Registration will be held in the «Bizkaia Aretoa» of the University of the Basque Country

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Fagus sylvatica-dominated woods of Italy: an updated classification

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Coenological features of European beech forests were recently analyzed in the context of European vegetation classification by Mucina et al. (2016) and Willner & al. (2017). In these studies some areas of Italy were under-represented, especially the Piedmont western Alps and northern Apennines. In order to fill this gap and to test the recent European classification on a national scale, data from the Italian beech-forest dataset (extracted by the main Italian databases VegItaly, BVN/ISPRA and Vegetation Plot Database – La Sapienza University) were integrated with published and unpublished beech wood relevés extracted by the database IPLA spa (a company dealing with environmental issues controlled by the Piedmont Region Administration).

The aim of this study is to present a first contribution to the floristic, ecological and phytogeographical characterization of Italian beech forests.

The data set was formed by 3518 georeferenced relevés and 1248 taxa. It was submitted to agglomerative clustering (Bray-Curtis distance, flexible beta method) and diagnostic species of the resulting groups were established by computing the *phi* coefficients. We distinguished eight groups:

Group 1 - Eutrophic and/or calciphilous beech woods of low altitudes, mainly on calcareous substrata, distributed in the Alps and Northern Apennines. Group 2 - Acidophilous beech woods, mainly on siliceous substrata, distributed in the Western Alps and Northern Apennines. Group 3 - Open beech woods, with heterogeneous floristic components, distributed in the Western Alps and Northern Apennines. Group 4 - Eutrophic beech woods, mainly on calcareous substrata, well characterized from a floristic view point, distributed in the Eastern Alps. Group 5 - Degraded beech woods with a high cover of *Sesleria argentea*, mainly distributed in Northern Apennines. Group 6 - Italian peninsular beech woods of low altitudes, mainly distributed in the Southern Apennines, mainly distributed in the mountains of Calabria. Several relevés coming from the Tuscan-Romagna Apennines unexpectedly showed some floristic similarity with this group. Group 8 - Eutrophic beech woods of the central Apennines, occurring especially on the Adriatic side of the Italian peninsula.

The syntaxonomical schemes proposed in the recent literature can be partially confirmed, but our analysis additionally identifies more local patterns of vegetation differentiation which are not apparent in coarse-scale international analyses.