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ABSTRACTS BOOK



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Talk

Pattern of diversity of *Castanea*-dominated formations along environmental gradients in the Tuscan-Emilian Apennines

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Chestnut-dominated formations (traditional orchards and coppices) are a key element of southern Europe mountain landscape and a habitat of conservation interest (9260 *Castanea sativa* woods), according to the Habitat Directive (92/43/EEC) of the European Union. As human-dependent ecosystems, they require an in-depth knowledge of the pattern of species diversity in relation to management and environmental gradients in view of preservation plans or to guide their dynamics. A dataset for the Tuscan-Emilian Apennines of existing phytosociological relevés with a *C. sativa* cover/abundance $\geq 50\%$ was built. This dataset consists of more than 800 relevés, with a temporal extent between 1970s and 2010s. Each relevé was coupled to a pair of coordinates together with a radius indicating the uncertainty of position. After updating nomenclature, the Ellenberg indicator values, chorotype and life form were attributed to each species. Data were analysed by ordination methods such as Canonical Correspondence Analysis. Diversity pattern of species composition in chestnut-dominated formations is due to hierarchically ordered environmental factors. Heliophilous vs sciaphilous species and acidophilous species are rough indicators of management gradients