

DIPARTIMENTO DI PIANIFICAZIONE DESIGN
TECNOLOGIA DELL'ARCHITETTURA



SAPIENZA
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54th SISV Congress

*Twenty years in the third millennium
with Vegetation Science*

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Abstract book

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The 54th Congress of the Italian Society for vegetation Science was set to be hold in June 2020 at the Faculty of Architecture of the University of Rome. The explosion of the COVID-19 pandemic in the spring of last year led first to move the congress to October 2020 and then definitively to 2021. However, the persistence of the serious situation of COVID-19 infections in Europe during these first months of 2021 and the uncertainty about the results of the current vaccination campaign does not allow us to plan a “face to face” congress as we had planned it.

The SISV 2021 congress will therefore be carried out as a **virtual conference**.



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FLORISTIC AND COENOLOGICAL ANALYSES OF THE *QUERCUS CERRIS* FORESTS IN ITALY

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Quercus cerris forests represent an important part of the forest heritage of the Italian peninsula. They show a wide distribution especially within the Apennines, from the sea level to the lower montane belt, while they are much rarer in northern Italy [1]. According to a recent nomenclatural paper [2], there are 39 validly published associations of “*Quercetum cerridis*” described for Italy at present. The EuroVegChecklist [3] encompasses the Italian *Quercus cerris* forests within two classes, three orders and eight alliances while the Prodrome of Italian vegetation [4] within one class, two orders and nine alliances. In our research, we compiled and stored the most ever comprehensive database regarding *Quercus cerris* dominated forest in Italy. This included 2900 relevés of which 64% published and 36% deriving from unpublished data from the authors of this paper. The whole data set treated with multivariate analysis procedures displayed the occurrence of nine major clusters. Considering the geographic provenance of the relevés and their distribution in these nine clusters only a partial correspondence with the current major syntaxonomic frameworks emerged. Floristic analysis allowed us to clearly distinguish i) thermophilous woods with a Tyrrhenian distribution, ii) acidophilous woods, iii) neutro-basiphilous submontane central Apennines woods, iv) montane woods of the central and southern Apennines. Together with these well-identifiable clusters there are others which do not exhibit differential species having ecological or biogeographical diagnostic power. It should be noted that relevés (coming from different phytosociological tables and sometimes from single ones) originally assigned to a given association not necessarily group in the same cluster but result frequently scattered in numerous of them (up to seven). This suggests that, besides proposing new and more accurate syntaxonomic frameworks that classify forest vegetation up to the alliance or (at the most) sub-alliance level, greater attention should be paid to the floristic, ecological and biogeographical consistence of the associations. “Association” is the only syntaxonomic rank related to a real object directly identifiable in the field, strictly corresponding to the concept of “plant community”, and probably the only one through which a phytosociologist can make him/herself understood when sharing field-work and data interpretation with colleagues of related disciplines, such as forestry, landscape ecology and others.

- 1) Blasi C., Di Pietro R., Filesi L., 2004. Syntaxonomical revision of *Quercetalia pubescenti-petraeae* in the Italian peninsula. *Fitosociologia* 41 (1): 87-164.
- 2) Terzi M, Ciaschetti G, Fortini P, Rosati L, Viciani D, Di Pietro R 2020. A revised phytosociological nomenclature for the Italian *Quercus cerris* woods. *Mediterranean Botany* 41(1): 101-120.
- 3) Mucina, L., et al.. 2016. Vegetation of Europe: hierarchical floristic classification system of vascular plant, bryophyte, lichen, and algal communities. *Applied Vegetation Science* 19, suppl. 1: 3–264.
- 4) Biondi, E. et al. 2014. Plant communities of Italy: The vegetation prodrome. *Plant Biosystems*, 148, 728–814.