Department of Environmental Biology, Sapienza University of Rome

31st CONFERENCE OF THE EUROPEAN VEGETATION SURVEY

May 21 – 25, 2023, Rome (Italy)

EUROPEAN VEGETATION SURVEY: METHODS AND APPROACHES IN A CHANGING ENVIRONMENT

Book of abstracts

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It's a matter of class. The uncomfortable syntaxonomic position of the Italian "thermophilous" oak forests

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The attribution of a plant community to a syntaxonomic class is not always an easy choice, and above all the forest communities seem to be often subject to different interpretations regarding their classification at the class level. In the Italian peninsula, the most widespread deciduous oak forests are those dominated by *Quercus cerris* and *Q. pubescens* s.l. and their classification has often been a source of debate. *Q. pubescens*-dominated forests find their coenological optimum within the South facing slopes where traditional agricultural land-use practices occur. According to Brullo & Marcenò (1985), southern Italy downy-oak species are not to be referred to *Quercus pubescens* Willd. but to other strictly steno-Mediterranean pubescent-oak taxa (e.g. *Q. virgiliana* (Ten.) Ten., *Q. dalechampii* Ten., *Q. congesta* C. Presl...) having their optimum in the meso-Mediterranean bioclimate. For this reason, these authors classified the related forests in the *Quercetea ilicis*. Other authors (e.g. Blasi et al. 2004) considered all the downy-oak associations as belonging to the *Querco-Fagetea* by virtue of the deciduous character of the guide species. Eventually, the EVC (Mucina et al. 2016) considered all the pubescent oak forests as an evolution (or a relict) of paleo E-European steppe-forests, therefore to be classified in the *Quercetea pubescentis*. For their part, *Quercus cerris*-dominated forests represent an important component of the forest heritage of the Italian peninsula. They show a wide distribution, especially within the Apennine range. In this case, the EVC classifies them in the class *Quercetea*

pubescentis as well, framing them within a single order and four alliances. On the other hand, Biondi et al. (2014) classifies them in the class *Querco-Fagetea* within two orders and six alliances. In this paper, we focus on the most suitable criteria to be considered for an appropriate interpretation and classification of these "thermophilous" oak forests at the rank of class.

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