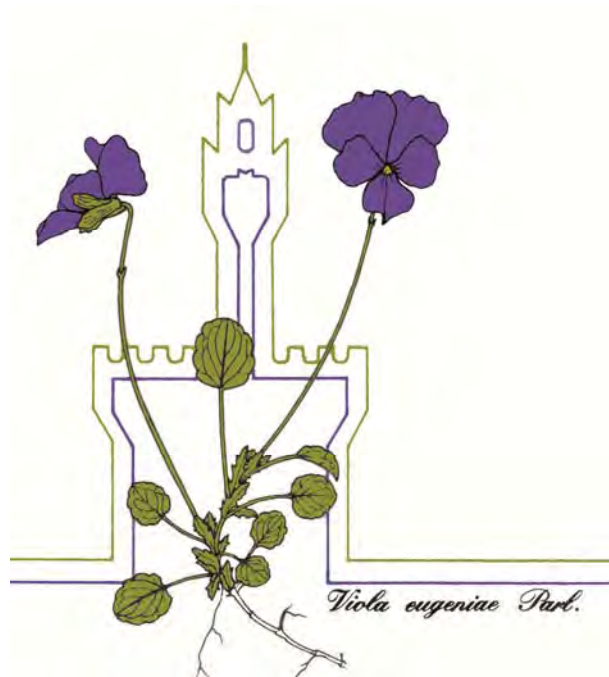


# 112° Congresso della Società Botanica Italiana

IV INTERNATIONAL PLANT SCIENCE CONFERENCE (IPSC)

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## ABSTRACTS

**KEYNOTE LECTURES, COMMUNICATIONS, POSTERS**

## 1.2 = PLANT COMMUNITIES AND LANDSCAPE DIVERSITY IN NW SICILY: THE MEMOLA EU FP7 PROJECT CASE STUDY

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The UE FP7 research project MEMOLA (Mediterranean Mountainous Landscapes: an historical approach to cultural heritage based on traditional agrosystems) aims at investigating landscapes through a diachronic study of the relationship between human populations and natural resources. The project analyzes, from an interdisciplinary perspective, the drivers and dynamics that have generated landscapes in four areas of the Mediterranean Region (Sierra Nevada, in Spain; Colli Euganei, in Northern Italy; Monti di Trapani, in Sicily; Vjosa Valley in Albania) with a research group of ten partners (1). The central issue of the Project is the historical use of water, related to traditional and irrigation systems, which has played a key role in the formation and transformations of Mediterranean agricultural landscapes. The presence of traditional and historical irrigation systems was used as one of the criteria for traditional agricultural landscapes identification. These systems are strictly linked to socio-economic structure and organization of the rural populations which have been exploited it since medieval times (2).

The traditional agricultural landscapes of Calatafimi rural district (NW Sicily) are the outcome of the historical relationship between man and nature, resulting from complex interactions between biodiversity (at all levels, including species richness, ecosystem and biotope diversity) and cultural diversity, including material and immaterial aspects (architectural heritage, historical irrigation systems, local traditional agricultural practices, dialectal culture) (3).

The methodological approach of Integrated Phytosociology has been considered a powerful interpretation key to examine this landscape as an integrated whole (4).

The syndynamic study of vegetation (series and geoserries) has been used as a marker to better understand human impact on land mosaic formative processes. Vegetation series are the result of the relationship between landscape natural heterogeneity and diversity produced by humans through historical land use. The existence of a direct causal link between vegetation series and anthropic factors represents a tool for new narratives of the trajectories of Mediterranean land mosaic. Vegetation series have been defined with the purpose of understanding the dynamic relationships between the diverse facets of land mosaic tiles.

Four vegetation series are recognizable: *Cisto cretici-Pino pineae* sigmetum; *Genisto aristate-Quercu suberis* sigmetum; *Oleo sylvestris-Quercu virgiliana* sigmetum; *Oleo-Euphorbio dendroidis* sigmetum. Agricultural land-uses associated to each vegetation series were then identified for relating traditional agricultural landscapes to ecological factors.

1) J.M. Martín Civantos, M.T. Bonet García (2015) PCA, 5, 347-356

2) J.M. Martin Civantos (2012) APSAT 1 Teoria e metodi della ricerca sui paesaggi d'altura, Mantova, pp. 51-73

3) G. Bazan, G. Baiamonte, A. Cancellieri, R. Schicchi (2017) Atti della XIX Conferenza Nazionale SIU, Planum Publisher, Roma Milano, pp. 189-195

4) G. Bazan, L. Gianguzzi, G. Baiamonte, R. Corselli, R. Schicchi, J. M. Martín Civantos (2017) The 60th Iavs annual symposium, Palermo