

## Bazan G.

Oral Presentation

### **Traditional agrosystems trajectories analysis using a vegetation science approach: the MEMOLA EU FP7 Project as a case study**

Session: Land-use patterns and vegetation in cultural landscapes

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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 cultural landscapes through a diachronic study of the relationship between human populations and natural resources. The project analyses from an interdisciplinary perspective the drivers and dynamics that have generated historical landscapes in four areas of 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.

The syndynamic study of vegetation (series and geoserries) can be used as a marker to better understand human impact on the formative processes of the landscape mosaic. In fact, the existence of a direct causal link between vegetation series and anthropic factors represents a powerful tool for new narratives of Mediterranean landscape biographies.

The agrosystems surrounding the town of Calatafimi (N-W Sicily) were selected as a representative area of Sicily. These agrosystems 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).

Vegetation series have been defined using the Integrated Phytosociology approach, with the purpose of understanding the dynamic relationships between the diverse facets of land mosaic tiles.

Four vegetation series were recognized: *Cisto cretici-Pino pineae sigmetum*; *Gestis aristate-Quercus suberis sigmetum*; *Oleo sylvestris-Quercus virgilianae sigmetum*; *Oleo-Euphorbia dendroides sigmetum*. Typical agricultural land-uses associated to each vegetation series were then identified.

The trajectories of single land use pattern elements, in terms both of vegetation dynamics and agricultural suitability, were defined through an interdisciplinary dialogue between the determinism of Vegetation Science and the perspective of historical studies.