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Poster Abstract - C.41

ASSESSING MOLECULAR DIVERSITY ON GRAPE (*VITIS VINIFERA* L.) GERMPLASM FROM BASILICATA REGION

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Wine production is a key agricultural activity in Italy, covering a significant area of arable land. Producers of variety wines have been able to improve the technical quality of their wines, due to the natural environment and /or to the more efficient farm structure. It is ascertained that the characteristics of each wine depend by different factors, such as the pedoclimatic condition, the grape must composition and the technological applications. Among all these factors, the wine typicality can be strongly influenced by the grapevine cultivar and the yeasts which have performed the fermentation process (Fleet, 1990 – J Wine Res *1*: 211-223).

The increasing interest to evaluate the natural genetic variability of each ecosystem has stimulated the development of approaches of molecular methods with the aim to advance significantly this knowledge. Nowadays different molecular methods are available to identify and characterize both grapevines and yeasts.

On the other hands, an high risk of genetic erosion in grape germplasm is determined by the spreading utilization of national and international grape cultivars in many areas of Mediterranean region typical for this species, included the south Italy and in particular the Basilicata region.

The grapevine (*Vitis vinifera* L.) is a clonally propagated crop and several morphological markers have been used for the characterization of plant germplasm, clarifying ambiguous denominations, but these methods are based on characters which can be highly affected by the environment.

The methods based on genetic variation have frequently been used for these purposes with more or less success, depending on the genetic relationships among the materials analysed and the number of markers employed. Isozyme and molecular markers, such as RAPD, RFLP, microsatellite and AFLP have been used on *Vitis vinifera* in several studies in order to discriminate among grape cultivars. However, few researches based on molecular markers and focused on the genetic variation within different clones of the same cultivars showed sufficient resolution to identify with a specific cultivar or to distinguish clones from somatic mutation or clonal selection.

The present research show a first survey on three typical grapevine areas of Basilicata region in order to retrieve and collect ancient grape clones mainly produced in these specific geographical areas : Vulture, Valdagri and the hilling area of Matera.

In the present paper starting from about 150 presumed clones, the genetic variability among genotypes were assessed based on different classes of molecular markers (microsatellites, AFLP).