

TAXONOMY AND GEOGRAPHICAL ORIGIN OF GRAPEVINE VARIETIES: CONSEQUENCE ON BIODIVERSITY AND NOMENCLATURE

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Taxonomy and geographical origin of grapevine varieties is a fascinating field of studies, important to improve our knowledge of the past but it is also a basic aspect to plan germplasm conservation and to search genetic sources for breeding. My talk starts with a short journey through the history of viticulture, which is the history of the origin and development of biodiversity of the cultivated grapevines. The history starts from the domestication to the constitution of thousands of varieties, which number has been estimated around 15.000 (including modern hybrids).

The following mechanisms of variety origin have to be supposed.

1. Direct domestication from local wild vine (real autochthonous cultivar)

2. Ancient introduction from other viticultural regions during the first steps of the establishment of a real viticulture and/or during the following historical periods; these varieties have to be supposed originated from different places and introduced in different times, by different routes and according to different mechanisms. In fact the introduction of a variety could have been consequent to a demic (by people) expansion, linked to human movements (colonists, emigrants, ...), or to a cultural radiation as the result of the commercial reputation of its wine or other characteristics like vine yielding capacity or frost resistance.

3. Local breeding and selection. Seedling intentionally or accidentally born from selfing and/or crossing from previously introduced varieties could have originated new local varieties and/or population-varieties. In this mechanism of varietal origin also the possible contribution of local wild vines should not be excluded (autochthonous cultivars).

In any case varieties derived by 1, 2 or 3 origin may have accumulated genetic mutations that by vegetative propagation and selection could have also significantly changed through the time phenotypes and could have originated new varieties or different clones within the same variety

Recent advances in knowledge on grapevines genetic structures and relationships with wild relatives will be presented and discussed as a basis for germplasm collection and conservation.

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