

PRACTICE ABSTRACT - N°2

Grapevine varieties rescue and study: what is an ampelographic collection?

Today's world viticulture is based on a few varieties (*Vitis vinifera* L.) that occupy most of the vineyards. Many of the varieties once typical of the old-world wine-growing regions have experienced heavy genetic erosion, which has caused the extinction of some of them. To counter this phenomenon, activities to recover and preserve local/minor varieties have been undertaken, leading to the creation of conservation vineyards or ampelographic collections. The main purposes of these collections are: i) to preserve varieties endangered or currently disappeared from commercial vineyards; ii) varietal characterization and identification by ampelography and molecular markers; iii) to evaluate cultural traits and oenological potential of historical local cultivars; iv) to support training and education programmes. The Shield4Grape project favours the conservation of ampelographic collections across Europe, such as the Grinzane Cavour collection in north-western Italy, where minor and rare local varieties are preserved, for a total of about 900 accessions (over 500 varieties). The Portuguese collection of Dois Portos holds approximately 760 accessions (over 600 varieties), including 250 non-redundant autochthonous cultivars, of which 143 are considered minor varieties.

Hungarian collection. University of Pécs



Greek collection. Hellenifera



Grinzane Cavour collection, Italy. CNR-IPSP



Portuguese collection_PRT051. INIAV

In southern Hungary 1500 accessions are hosted, including wine and table grapes, rootstocks and more than 30 unique varieties not present in international collections. The Greek collection hosted more than 1600 accessions from 130 Greek varieties (including 50 rare and 20 unknown varieties) and 50 accessions from 25 international varieties. Within Shield4Grape, the varieties present in these different collections are screened for their ability to tolerate pathogen attacks, specifically powdery and downy mildews and grapevine trunk diseases. Any variety proven to be tolerant can be re-evaluated for directing grape and wine production or for orienting breeding programmes aimed at obtaining new tolerant genotypes

ADDITIONAL INFORMATION

Grinzane Cavour collection, property of National Research Council of Italy Institute for Sustainable Plant Protection (CNR-IPSP), Strada delle Cacce 73, Torino 10135, Italy: http://www.ipsp.cnr.it/wp-content/uploads/2022/10/Grinzane_eng.pdf [Open link in new window](#)

Hungarian collection, property of University of Pécs, Research Institute for Viticulture and Oenology / H-7634 Pécs, Pázmány P. u. 4., Hungary: <https://docs.google.com/presentation/d/10nmseYmespoWFnEoS9-OEq1RYzowTzA5/edit?usp=sharing&ouid=109300911938235523954&rtpof=true&sd=true> [Open link in new window](#)

Portuguese collection (PRT051), property of IP INIAV Dois Portos, Inst Nacl Invest Agr & Vet, Torres Vedras, Portugal: <https://www.inia.pt/> [Open link in new window](#)

Greek collection, property of Hellenifera, Leontio Nemea 20500, Corinth, Greece: <https://www.hellenifera.gr/en/about>

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