

PROSPECTION AND GENETIC IDENTIFICATION OF GRAPE CULTIVARS FROM OLD SERBIAN VINEYARDS

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INTRODUCTION

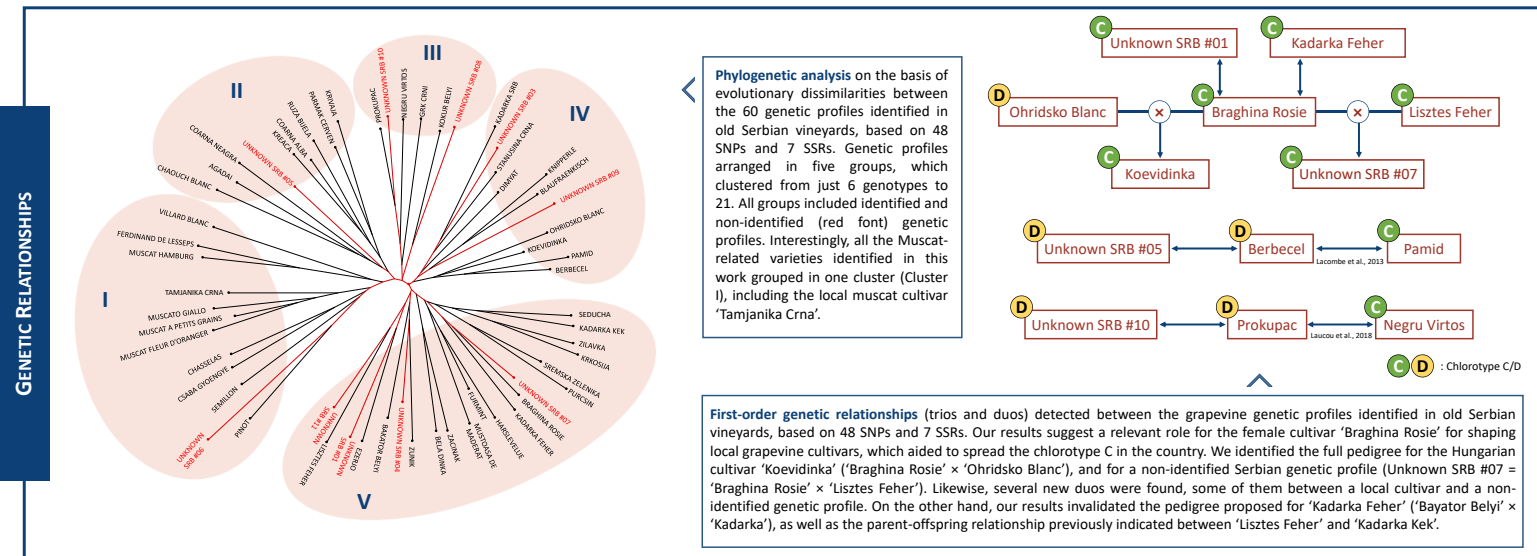
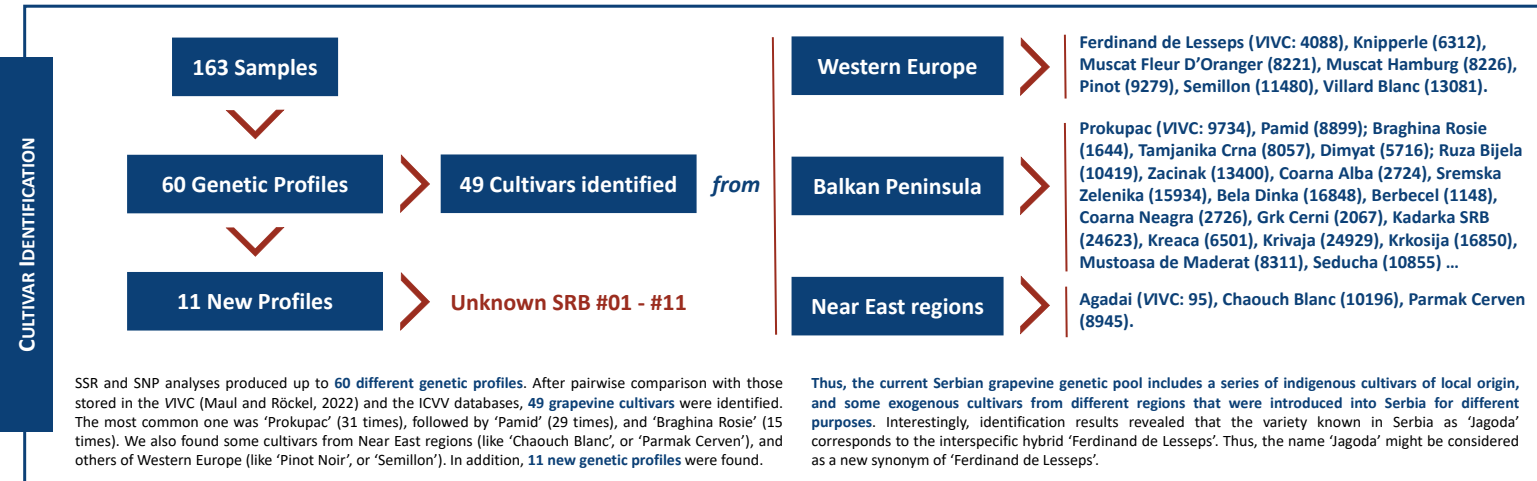
Serbia is located in the Central Balkans, a region acknowledged for a long-standing viticulture tradition. In fact, archaeological findings and other pieces of evidence indicate that viticulture and winemaking practices in Serbia can be traced back to the Iron and Bronze Ages (Burić, 1972). As in other countries of the Western Balkans, modern Serbian wine production relies on the cultivation of a few well-recognized international grape varieties together with some local varieties, such as 'Prokupac', 'Smederevka' (syn. 'Dimyat'), 'Plovdina' (syn. 'Pamid'), or 'Tamjanika Crna' (Bešlić *et al.*, 2012). Nevertheless, other local grape cultivars can be found across Serbia, sometimes grown by small winemakers in specific regions of the country, or in remote locations at the

edge of disappearance. Studies in neighbouring countries have highlighted the relevance of studying these endangered genetic resources to reveal how national genetic pools were formed, as well as to provide useful information on the historical development of viticulture in the Balkans (Maraš *et al.*, 2021; Žulj Mihaljević *et al.*, 2015). Here, we report the first results on the genetic identification of 163 samples collected from cultivated grapevines in old vineyards from different viticulture regions of Serbia. To our knowledge, this is the largest prospection of local grape cultivars performed in the country so far.

MATERIAL AND METHODS



RESULTS AND DISCUSSION



FUTURE WORK

- The 60 non-redundant genetic profiles obtained will be genotyped with an additional set of 192 SNP markers to deepen in their genetic diversity and parentage relationships.
- The Serbian genetic profiles identified in this work will be studied with those from other Balkan countries and other viticulture regions, to analyze their genetic structure in a wider context.
- In parallel, we are working on the genetic analysis of more than 100 grapevine samples from an herbarium found in the Serbian town of Sremski Karlovci, dated between 1812 and 1824. The comparative analyses of the results obtained in both works will be useful to evaluate how the local varietal assortment changed in the last 200 years.

REFERENCES

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