PARREL, an aragonese wine-producing variety of the Ebro depression. Adaptation to a semi-arid terroir of cultivation.

E. Franco1, A. Pavon2, Y. Gogorcena3, R. López4, L.J. Andreu5, J.J. Usón6, E. Herreño3
1. CTA-Gobierno de Aragón, Ud. de Enotología, Zaragoza (Spain); 2. CTA – Gobierno de Aragón, Ud. de Tecnología y Mejora de las Vid, Zaragoza (Spain); 3. EEA-CSI, Zaragoza (Spain); 4. LAAE-I2A Univ. de Zaragoza; 5. CTA-Gobierno de Aragón, Ud. de Cultivos Leñosos, Zaragoza (Spain); 6. CITa, Avda. de Montañana, 930, 50039, Zaragoza (Spain) scholarly@cta-aragon.es

Interreg POCTEFA VALOVITIS

The VALOVITIS project aims at improving competitiveness of the wineries from the Pyrenean Piedmonte area in a global market through innovation and differentiation. The grapevine genetic resources of endangered varieties in these territories will be prospected, identified through a participatory approach and its sanitary status will be assessed. Their safeguard will be ensured by their introduction in existing repositories and vineyards studies.

A demonstration project: The assessment through field trial evaluation of the agronomic, technological and aromatic values of these minority varieties let transfer the knowledge to wineries, nurseries and professionals of the vine selection. These innovative varieties will provide a competitive advantage to SMEs of the local wine industry, keeping economic and social dynamism in the rural areas covered by the project.

1. The grape

PARREL is a minority variety located mostly in Aragon. Its grape is characterised by a tender skins and a dark color.

2. Where has it been found?

This variety is included in the Germplasm Bank managed by the Centre for Agri-food Transfer (CTA) of the Government of Aragon since 1989. The plant material source: Aragon basin of the Ebro river, mostly in the province of Zaragoza.

Climate: semi-arid.

3. Molecular characterization

The molecular profile of PARREL described previously with six SSRs was not included in any database (Buhner et al., 2010). Moreover, the molecular profile of this variety obtained with eight SSRs is recorded in the IMIDRA database as GEN 0905.


The molecular profile obtained with eight SSRs was identical regardless of the origin of the accessions (see above).

4. Agronomic properties and phenoLOGY

Distribution of anthocyanin pigmentation in young pompono not trimmed and of medium intensity.

Pentagonal limb in the adult leaf with five lobes and rectilinear teeth.

Medium size and low compact bunch.

Medium-sized spherical berry with a blue-black epidermis.

Pulp without coloration and with nuggests.

It is observed that climatic conditions have a great influence on the setting of the bunch.

The weight of the berries and the number of bunches per vine tend to be more constant values than the number of berries per bunch.

High agronomic production, maintained over time and good resistance to powdery mildew.

5. Conclusions and future prospects

The terroir has shown less effect than the varietal characterization in the production data.

According to the results obtained from the chemical and sensory analysis, the variety is suitable to produce both red and rose quality wines, the latter with a predominance of terpnic aromas.

The red wines present sufficient alcoholic strength.

The PARREL variety, according to its agronomic and oenological characteristics, deserves an in-depth study of its potential.