



Physical and chemical characterization of grape fruits for processing from the Embrapa Semi-arid active germplasm bank

Patrício Ferreira Batista¹, Victor Alexandre Freire de Vasconcelos², João Paulo Dias Costa²,
Patrícia Coelho de Souza Leão³, Maria Auxiliadora Coêlho de Lima³
¹*CNPq/FACEPE Post-Doctor Scholarship, Petrolina, Brazil*
²*Universidade Federal do Vale do São Francisco, Petrolina, Brazil*
³*Embrapa Semiárido, Petrolina, Brazil*
E-mail: auxiliadora.lima@embrapa.br

The characteristics of the tropical viticulture in the Lower Basin of São Francisco Valley require appropriate management techniques and responsive cultivars to the regional conditions. Then, it is important do consider opportunities for inclusion of new cultivars, making the characterization and evaluation of germplasm in specific conditions an important strategy for selection of adapted genotypes and with other desirable traits in breeding programs (Borges et al., 2012). Thus, the objective of this study was to characterize physical and physicochemical attributes of quality in grapes for processing, maintained in the Active Germplasm Bank of Embrapa Semi-arid. The experiment was carried out in the Mandacaru Experimental Field, in the Lower Basin of São Francisco Valley, Brazil. The vines were grown in espalier, in bilateral cord, in 3 m x 2 m spacing, on the IAC-572 rootstock and adopting the drip irrigation. In the production cycle of the second semester of 2015, the cultivars Ancellota, BRS Carmem, Campanário, Cabernet Sauvignon, Carmenére, Cinsaut, Ferral, Gamay Beaujolais, Grand Noir, Malbec, Máximo, Merlot, Olivetti Noir, Periquita, Portuguesa Blanes, Royalty, Sangiovese, Sauvignon, Tempranillo and Tinta Roriz were evaluated. Bunches were picked when the berries were ripe. After harvesting, they were transported to the Postharvest Physiology Laboratory of Embrapa Semi-arid, where they were evaluated for the following characteristics: skin color (measuring luminosity – L – and a* and b* attributes), resistance to a compression force, soluble solids (SS) content, titratable acidity (TA) and SS/TA ratio. Grape fruits cultivar Royalty were highlighted by the highest soluble solids content and a moderate titratable acidity, being an important aspect for the wine quality.

Acknowledgments: FACEPE/CNPq (Grant n° 301518/2015-7) and Embrapa Semi-arid.

References

BORGES, R.M.E.; LEÃO, P.C.S.; GONÇALVES, N.P.S, 2012. Heterogeneidade intervarietal em germoplasma de videira no Semiárido brasileiro. Petrolina: Embrapa Semiárido, 18 p. (Embrapa Semiárido). Boletim de Pesquisa e Desenvolvimento, 100.