



3114 - Crop Breeding & Genetics

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NOVEL GRAPE CULTIVARS ADAPTED TO BRAZILIAN GROWTH CONDITIONS SUITABLE FOR QUALITY-WINE PRODUCTION

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Embrapa Grape and Wine;

Embrapa Grapevine Breeding Program aims to develop disease resistant, productive and widely adapted interspecific hybrid cultivars for wine-making, exhibiting organoleptic characteristics similar to those of *Vitis vinifera* grapes. Varieties with these features will be, in the future, the basis for the development of organic wine production. The breeding program is based on sexual hybridizations to obtain segregating populations, submitted to field evaluation and selection cycles. During the final stage of the program, the selections are tested in semi-commercial scale, under real production conditions; and the agronomic performance and the characteristics of the wine made from the potential cultivar are evaluated, alongside by breeders, growers, winemakers and enologists. The basic germplasm used in the crosses consist of *V. vinifera* cultivars, to provide quality attributes, and *V. labrusca*, interspecific hybrids and wild species of *Vitis* as sources of adaptative traits and resistance to fungal diseases. In recent years, three novel grape varieties for wine making ('Moscato Embrapa', 'BRS Lorena' and 'BRS Margot') were developed and released by the Grapevine Breeding Program. They are hybrid grapes whose wine refers to the product made with *V. vinifera* grapes. Further information on the cultivars is available on the open-access Embrapa Grape and Wine website. Three advanced selections of white grapes with muscat flavor are under development by the Breeding Program, in recent years. Agronomically, the selections display high productivity and good disease tolerance. Sensorial analysis of the wine obtained by microvinifications of berries from the advanced selections resulted in a final product with appropriate color, aroma and flavor. The taste analysis highlighted the predominance of muscat aroma, with subtle fruity and herbaceous ones, lacking the bitter flavor or taste. The elaborated wines are similar to *V. vinifera* wines. The advanced selections for wine-making are under validation in partnership with growers from the states of Rio Grande do Sul and Goiás. Partial results of grapevine plant performance under field conditions (yield, adaptation, disease resistance and maturation indices), chemical analysis and sensory features of the wine, during the last three growing seasons, suggest that, at least, one novel Brazilian grapevine cultivar for wine elaboration, exhibiting muscat flavor, will be released in the near future.