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The aromatic potential of marc distillates obtained from "resistant" cultivars

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The consumer's increasing attention towards health and environmental respect has pushed grape growers to look for low chemical production practices. This demand of certified organic products is constantly increasing also in the spirits industry, of which grappa is the Italian most traditional distillate. Recently, some hybrids obtained from interspecific crosses of Vitis spp have been included in the Italian National Register of Wine Grape Varieties. These cultivars show a certain degree of resistance to molds attack, thus requiring a minor number of treatments and chemicals. In certain vine growing areas of the Northeast of Italy, the cultivation of some these hybrids is permitted under observation and the resulting wines can be part of protected geographical indication (PGI) products.
However, the available information about the aromatic potential of wines produced with these varieties is rather scarce,[1,2] and virtually null regarding wine or marc distillates. In this extent, It has been surveyed for the first time to the best of our knowledge, the aromatic potential in marc distillates of 7 hybrids, inscribed (Bronner, Helios, Johanniter, Muscaris, Solaris and Souvignier Gris) or at the approval stage (Aromera) for the inscription in the production regulation documents of some Trentino PGI's. All grapes were grown in 2016 in a single plot at Navicello (Rovereto, TN); marcs of every grape cultivar were obtained from the production of experimental wines at semi-industrial scale, fermented in a single batch and distilled in triplicate with a micro-distiller, similar to that traditionally used in Trentino. The volatile composition of the heart fraction of the distillate was evaluated by HRGS-MS and GC-FID. The analysis of the raw distillates showed a high content of terpenes in Aromera and Muscaris samples: the first is charachterised by high linalool and α-terpineol - responsible for the white flower scents -, while the latter has showed the highest contents of citronellol, nerol and geraniol, known for their citric and rose-like notes. These early results are although strongly influenced by the matrix characteristics and limited number of cases however, the data obtained represent a starting point of a broader project conducted by the Edmund Foundation Mach (FEM), aimed to deepen the knowledge about these mold resistant varieties grown in Trentino.

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