Determination of biogenic amines on Syrah tropical wines from São Francisco Valley, Brazil

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Biogenic amines are organic bases with low molecular weight and the conditions that can stimulate the occurrence of biogenic amines in wines depend of the time of contact of the must with grape skin, amino acid content and other biological and environmental factors. The presence of biogenic amines in food and wine remains a problem that deserves attention due to its human potential toxicity. The aim of this study was to identify and quantify biogenic amines in an experimental Syrah red wine produced in a tropical region in Brazil. The wine was produced at the Enology Laboratory (Embrapa Semiarid, Petrolina, PE, Brazil) and the bioactive amines were determined at Federal University of Minas Gerais, Brazil. The amines were separated by ion-pair reverse phase HPLC and quantified fluorimetrically after post-column derivatization. The five biogenic amines observed on Syrah wine and their concentration (μ g mL⁻¹) were putrescine (5.63), cadaverine (1.14), tyramine (2.57),phenylethylamine (0.23) and hystamine (0.12). These results are in accordance with those observed in the literature for wines.

Area: Enology Theme: Enological chemistry

Financial Support: CNPq