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Statistical Analysis of the Factors that Influence the Properties of Blueberries from Cultivar Bluecrop

Authors : Raquel P. F. Guiné, Susana R. Matos, Daniela V. T. A. Costa, Fernando J. Gonçalves

Abstract : Because blueberries are worldwide recognized as a good source of beneficial components, their consumption has increased in the past decades, and so have the scientific works about their properties. Hence this work was undertaken to evaluate the effect of some production and conservation factors on the properties of blueberries from cultivar Bluecrop. The physical and chemical analyses were done according to established methodologies and then all data was treated using software SPSS for assessment of the possible differences among the factors investigated and/or the correlations between the variables at study. The results showed that location of production influenced some of the berries properties (caliber, sugars, antioxidant activity, color and texture) and that the age of the bushes was correlated with moisture, sugars and acidity, as well as lightness. On the other hand, altitude of the farm only was correlated to sugar content. With regards to conservation, it influenced only anthocyanins content and DPPH antioxidant activity. Finally, the type of extract and the order of extraction had a pronounced influence on all the phnolic properties evaluated.

Keywords : Antioxidant activity, blueberry, conservation, geographical origin, phenolic compounds, statistical analysis
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