Physicochemical Properties of Cornelian Cherry Fruit (Cornus mas L.) Grown in Qazvin province, Iran

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ABSTRACT

Cornelian cherry (Cornus mas L.) has high biological and antioxidant activities. It has known for its tonic, analgesic and diuretic activities. In the present study physicochemical properties of cornelian cherry fruit collected from different areas of Qazvin province, Iran including total soluble sugar (TSS), total sugar (TS), pH, total acidity (TA), TSS/TA, dry matter, ash, flesh/seed, length (L), width (W), L/W, fruit mass and fruit weight have been investigated. Total sugar (8.83 g.Kg⁻¹), TSS/TA ratio (14.47), dry matter (%20.71), fruit/seed ratio (5.02), fruit mass (2.16) and fruit weight (2.59) measurements of the examined cornelian cherry in the present study were lower than those reported by other researchers for cornelian cherry in the other countries. However, total soluble solid (%17.61) and ash (%0.71) content of the examined cornelian cherry were higher than those reported by other researchers. Among measured physicochemical properties evaluated for cornelian cherry, TA (%1.24), pH (3.1), length (20.9 mm) and width (13.85 mm) measurements were similar to those reported for cornelian cherry in the other studies. Cornelian cherry fruit samples collected from different areas of Qazvin province showed different properties. The variations between physicochemical properties measured for cornelian cherry fruit samples were may attributed to different genotypes of the fruit and its cultivation and growth conditions.

Key words: Physical properties, Cornus mas, Cornelian cherry fruit, Chemical characteristics.

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