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Investigation of Functional Properties in Leaf and Stem of Barberry Species: An Overview

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Abstract

Barberry is widely distributed throughout the world and recognized as a valuable plant. Different parts of barberry including fruits, flowers, leaves, stems and roots. It contains very important compounds such as anthocyanins, alkaloids, flavonoids, phenolic compounds, vitamins and etc., which have been used for many years in traditional medicine. However during all these years, a great part of this plant has wasted at the time of pruning, ornamenting and harvesting especially branches, stems and leaves.

These compounds have strong impact on the human health and also useful in preventing many diseases. Studies have been shown that the berberine in barberry reduces cholesterol and blood glucose, prevents from getting neoplastic disease and Alzheimer. It is also an antimicrobial and antifungal compound and has antioxidant properties. Considering the medicinal and nutritional features of barberry plant, a literature review was carried out on the functional compounds of leaf and stem in different species of barberry. According to the results, it can be said that barberry plant derivations can be considered as a useful additive and functional compounds.

Therefore more knowledge about the species varieties of barberry, their valuable compounds and finding suitable methods for their optimum extraction decrease the waste of harvesting and pruning. It can be considered as a useful additive and functional compounds as well.

Keywords: Barberry, Functional Compounds, Leaf, Stem, Therapeutic properties.