مقالات بخش کشاورزی
Effect of harvesting and drying methods on the anthocyanin content of seedless barberry

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Abstract:

Seedless Barberry is one of the endemic shrubs in southern Khorasan province that has several pharmaceutical and food applications due to its compounds such as anthocyanin. Therefore, study the effects of managerial factors on the fruit quality of barberry, especially its anthocyanins content is important. In order to study the effects of harvesting and drying methods on fruit quality of barberry an experiment was conducted using a factorial experiment based on Randomized Complete Block Design with three replications in Sorkand, Southern Khorasan province, Iran. Studied factors consisted of picking off methods (branch and berry picking off) and fruit drying methods (sun-drying and shade-drying). Results showed that anthocyanin content of fruit barberry in berry picking off was 1.6 percent more than branch picking off. Also, anthocyanin content in sun drying method was two times more than shade drying method. Interaction results revealed that the highest and lowest amount of anthocyanin were obtained in berry-picking off + sun drying and branch-picking off + shade drying treatments, respectively (11.4 and 11 mg/100 ml of extract). Generally, experimental results showed that berry-picking off and sun-drying methods were more effective to improve the anthocyanin content of seedless barberry.

Key words: Seedless Barberry, Sun- drying, Shade- drying, Branch picking off, Berry picking off.

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