

Storage Influence on Physico-Chemical Composition and Antioxidant Activity of Jamun Drink Prepared From Two Types of Pulp

Authors : Muhammad Atif Randhawa, Mahreen Akhtar, Sidrah

Abstract : In this paper, Jamun (*Syzygium cumini*; Myrtaceae) drink enriched with jamun pulp and seed was assessed for different physicochemical parameters (titratable acidity, pH, TSS, ascorbic acid, and total sugars and reducing sugars) and phytochemical aspects at every 15 days interval till 60 days storage period. Jamun pulp both with seed and without seed were used at levels of 7, 10 and 13 percent to prepare jamun drink in six combinations; T1 (7% pulp without seed), T2 (10% pulp without seed), T3 (13% pulp without seed), T4 (7% pulp with seed), T5 (10% pulp with seed), T6 (13% pulp with seed). Storage period resulted decrease in pH (4.18 to 4.08) and ascorbic acid (21.92%) significantly along with phenolic contents (6.13 to 4.85g of GAE/kg) and antioxidant activity (70.68 to 48.62 percent) within treatments. All treatments showed significant increases in total sugars (11.59 to 11.80%), reducing sugars (2.30 to 2.50%), TSS (12.2 to 13.32 °B) and acidity (0.23% to 0.31%) during storage. Treatments T3, T5 and T6 showed best results in terms of all physicochemical parameters during storage. Statistically significant differences were obtained among sensory parameters as a function of pulp type and concentration, while treatment T5 (10% pulp with seed) obtained highest score (7.16) in terms of all sensory parameters. It can be concluded that nutrient rich jamun drink can be prepared as an attempt to add value to the underutilized jamun fruit of Pakistan.

Keywords : antioxidant activity, Jamun beverage, physicochemical, storage