

Title Effect of varieties and preservative levels on shelf life of aonla juice
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Abstract

Aonla (*Embllica officinalis* Geartn) occupies an important place among indigenous fruits of India its versatile uses. It is a perishable fruit therefore, it is necessary to extend its shelf life by adopting good postharvest management practices. Postharvest loses are the major constraints, which discourage farmers to go for aonla cultivation. Keeping in view the present investigation was conducted in the Department of Horticulture, Allahabad Agricultural Institute- Deemed University during 2007-2008, to find out the suitable cultivar for aonla juice preparation with suitable dose of preservatives to prolong its storage life. The experiment was laid out in FCRD (Factorial Completely Randomized Design) with three replications. In all, there were two varieties of aonla i.e., Banarasi (V1) and NA-7 (V2) and five levels of preservative i.e., 0 ppm (S0), 250 ppm (S1), 500 ppm (S2), 750 ppm (S3) and 1000 ppm of KMS (S4). Observation were recorded on TSS, acidity, total sugar (%), vitamin C, pH and reducing sugar. The juice was stored up to 120 days. The results indicated that at 120 days after storage, significantly maximum TSS (17.47%), total sugar (11.83%), vitamin C (105 mg/100g), pH (2.95), reducing sugar (8.17%) and significantly minimum acidity (0.88%) was recorded with aonla juice treated with 750 ppm of KMS. Between the varieties significantly maximum pH (2.28), TSS (16.45%), reducing sugar (7.97%), ascorbic acid (102.67 mg/100g) and minimum acidity (1.31%) was found with Banarasi. Among interactions Banarasi + 750 ppm KMS was found to have maximum TSS (17.90%), ascorbic acid (105.33 mg/100g) and minimum acidity (0.83%). The highest B:C ratio (5.21) was also found with this combination. Considering the degustation properties, the overall acceptability in terms of texture, flavour, colour, appearance and taste was observed in the juice obtained from Banarasi with 750 ppm of KMS.