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RESEARCH PAPER

# Standardization of techniques for aonla sour pickle with varietal difference

■ B.A. KARAPATIYA, N.R. RAY, A.D. PATEL AND H.C. PATEL

**SUMMARY :** The experiment on standardization of techniques for aonla (*Emblica officinalis* Gaertn.) sour pickle with varietal difference (Gujarat Aonla-1 and Chakaiya varieties) was carried out at Fruit Processing Center, Department of Horticulture, B. A. College of Agriculture, Anand Agricultural University, Anand during *winter* 2009-2010 by using factorial completely randomized design (FCRD) with two independent variables *viz*., varieties and four treatments with three replications. The treatments comprising different combinations of varieties (Gujarat Aonla-1 and Chakaiya) with fresh and blanched (at 75$^0$C and 80$^0$C temperature up to 10 and 5 minutes, respectively) aonla fruit segments cured in 10 per cent dry salt solution with or without 0.1% sodium benzoate preservative and ingredients. The result indicated that to prepare aonla sour pickle with the fresh segments of Chakaiya variety + 10 per cent dry salt for 2-3 days + ingredients + 0.1 per cent sodium benzoate was good for consumers performance and it retained physico-chemical parameters like ascorbic acid (73.17 mg/100g), pH (3.06), acidity (2.64 %), crude fibre (2.09 %), reducing sugar (9.82 %), non-reducing sugar (1.93 %) and total sugar (12.72 %) and also organoleptic score (out of nine) like colour (8.10), flavour (8.05), taste (7.65), softness (7.01) and overall performance (7.67) during four months storage period.

**Key Words :** Aonla, Pickle, Recipes, Sodium benzoate, Glass bottle, Organoleptic evaluation

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Among the fruits, aonla (*Emblica officinalis* Gaertn.) is one of the oldest Indian fruit having a richest source of vitamin-C. The pulp of the fresh fruit has contained 200–900 mg/100g of vitamin-C in fruit (Bajpai and Shukla, 1985). This nutritious fruit delivered to the ultimate consumer through post-harvest system without any nutritional and quality losses. Hence, attention has been focused on the preparation of different valuable aonla products such as pickle, preserves (murabba), jam, jelly, dried chips, tablets, powder, etc. Aonla sour pickle contains rich amount of nutrients like ascorbic acid, proteins, fat, minerals, fiber, carbohydrate, calcium, phosphorus, iron, nicotinic acid, carotene, thiamine, reducing sugar, non-reducing sugar, total sugar etc. Aonla sour pickle is greatly sought after in the market owing to their tangy taste and wonderful aroma.

MEMBERS OF THE RESEARCH FORUM

Author for Correspondence :
**B.A. KARAPATIYA,** Department of Horticulture, B.A. College of Agriculture, Anand Agricultural University, ANAND (GUJARAT) INDIA

Coopted Authors:
**N.R. RAY, A.D PATEL AND H.C. PATEL,** Department of Horticulture, B.A. College of Agriculture, Anand Agricultural University, ANAND (GUJARAT) INDIA

## EXPERIMENTAL METHODS

The research was carried out at Fruit Processing Center, Department of Horticulture, B. A. College of Agriculture, AAU, Anand in year 2009-2010 by using factorial completely randomized design (FCRD) with two independent variables *viz*., varieties and four treatments with three replications. Materials used during experimentation were aonla fruits cvs. Gujarat Aonla-1 and Chakaiya procured from the Horticulture Research Farm, BACA, AAU, Anand. Other raw materials such as spices, condiments, groundnut oil etc. were purchased from the local market. The aonla fruits were washed with clean water. According to treatments aonla fruits blanched at 75$^0$C and 80$^0$C temperature up to 10 and 5 minutes with use of gas stove,