

DETERMINATION OF AMOUNT OF ASCORBIC ACID PRESENT IN CITRUS FRUITS AVAILABLE IN BUTWAL SUB-METROPOLITAN CITY NEPAL

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ABSTRACT

In this study, five samples of citrus fruits; Lemon, Orange, Sweet orange, Tangerine, and lime were collected from the local market of Butwal City and analyzed for pH and ascorbic acid contents in them. All these studies were carried out in the laboratory of Butwal Multiple Campus from 10 to 15 December 2021. The study compared the concentration of ascorbic acid in different citrus fruits. Determination of ascorbic acid was carried out by iodometric titration and DCPIP titration method while pH was measured by a digital pH meter. The highest amount of Ascorbic acid was found in Tangerine and the least in lime. The amount of ascorbic acid (mg) found in 100 ml of fresh juice of the lime, lemon, Tangerine, sweet orange, and orange citrus fruits were 39.09 ± 1.08 , 49.81 ± 0.86 , 70.4 ± 1.6 , 63.6 ± 2.13 , 52.8 ± 2.44 respectively. Similarly lowest pH was found in lime and the highest in sweet orange.

KEYWORDS: Ascorbic acid, DCPIP, iodine titration, citrus fruits, Ph.

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