PROCEEDINGS

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DETERMINATION OF VITAMIN C (ASCORBIC ACID) IN LIME AND LEMON

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To find out the quantity of vitamin C (ascorbic acid) content in lemon juice (Citrus limon) and lime juice (Citrus aurantifolia). Matured lime and lemon fruits were collected from 10 different local markets in different districts. Fresh juices of fruits were obtained, separately. Metaphosphoric acid (HPO3) 3% was prepared. Ascorbic acid standard was made. Five ml of 3% metaphosphoric acid was added to 5ml of standard Ascorbic acid solution. Ascorbic acid content in both fruit juices was determined separately using a titrimetric method with 2, 6 Dichlorophenol Indophenol as an indicator. End point of the titration was observed when the solution in the titration flask turns to pink colour. Samples were triplicated. Dye factor was determined by the formula. Average dye factor was 0.126. The range between 45.05 mg - 49.27 mg and 31.26 mg -34.14mg ascorbic acid found in 100ml of lime and lemon juice respectively. The average ascorbic acid in 100 ml lime juice and lemon juice were 47.16 mg and 32.7 mg respectively. Ascorbic acid content found high in lime juice than in lemon juice. Therefore, lime can be used instead of lemon juice in excess weight reduction.

Keywords  Vitamin C, lemon juice (Citrus limon), lime juice (Citrus aurantifolia),