

Studies on Preservation of Tender Coconut water

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ABSTRACT

Experiments were conducted during 2006 for preserving the tender coconut water by adding chemical preservatives to increase shelf life. The samples were analyzed for their pH, sugar and microbial count after 2, 5, 10, 15, 20 and 30 days of storage. The preserved samples were analyzed organoleptically for their color, flavor, taste and overall acceptability. The pH of the sample treated with 1000 ppm potassium metabisulphite was found to increase from 4.300 to 6.575 during 20 days of storage period and there was a falling trend at the end of 30 days of storage period. In all the cases, the pH was more than the initial conditions. It was nearer to neutral pH during 15 to 20 days of storage and variation of it was between 6 and 7. It was observed from the results that the sugar content gradually decreased with increase in storage period. It was observed that the microbial count of samples gradually increased with increase in storage period. It was found that microbial count of the control sample increased from 11×10^4 to 131×10^4 for a storage period of 30 days whereas it increased from 10×10^4 to 71×10^4 for the sample treated with 1000 ppm potassium metabisulphite. The coconut water treated with 1000 ppm potassium metabisulphite yielded an acceptable product to preserve up to 15 days with a score grade of like moderately.

Key words : Coconut water, Microbial count, pH, Preservatives, Sensory evaluation, Sugars.