

SOME ASPECTS OF PHYSIOCHEMICAL PROPERTIES AND EVALUATION OF PROBIOTIC ISOLATED FROM AFRICAN STAR APPLE (*Chrysophyllum albidum*)

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ABSTRACT

Two LAB bacteria were isolated from African star apple (*Chrysophyllum albidum*), characterized and identified as *Lactobacillus lactis*, *Lactobacillus plantarum*. The *Lactobacillus lactis* and *Lactobacillus plantarum* survived at different temperatures, pH and tolerance to bile salt. The proximate, pH and minerals analysis of African star apple were determined using standard methods which varied in contents. The fruit had crude fibre of 18.18%, protein of 1.71% and moisture content of 64.32%. The potassium content was 112.00ppm followed by calcium, sodium and iron with 78.00ppm, 55.50ppm and 0.69ppm respectively. On the basis of the findings, nutritional content of the *C. albidum* gave an indication of its usefulness in jelly or jam manufacturing and the ability of LAB, especially *Lactobacillus* sp isolated from *C. albidum*.

Keywords: *C. albidum*, Probiotic, Temperature, pH, Tolerance, Bile-Salt.