DETERMINATION OF NUTRITIONAL FACTS OF PALMYRAH (*BORASSUS FLABELLIFER*) SAP BASED PRODUCTS EXISTING IN THE MARKET OF JAFFNA PENINSULA

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A study was carried out to determine the nutritional composition of Plamyrah sap based products (jaggery, treacle and sugarcandy) existing in the market. The study was conducted at Palmyrah Research Institute in order to determine nutritional variation in such products and to display nutrient and proximate composition on food label of the respective products. Since five Palm Development Co-operative Societies (PDCS) out of 16 in Jaffna Peninsula only had produced Palmyrah sap based products as jaggery, treacle and sugarcandy in the year 2014, all five were selected for the study. An experiment was performed in Complete Randomized Design (CRD). Protein, fat, carbohydrate (total sugar and reducing sugar), phosphorous, calcium, magnesium and iron contents were determined in AOAC method. All results were analyzed in SAS software and the mean separation was done by LSD at p=0.05. Protein content of the sap based products has ranged from 0.62% to 0.86%. Wide variation in fat content of the jaggery was observed among areas and it varied from 0.056% to 0.52%. Percentage of fat in treacle and sugar candy was found 0.012% to 0.018%. Total sugar content was varied differently in sap based products and jaggery (from 78% to 94.6%), for treacle which is 62% to 67%, and for sugarcandy that is from 85% to 95%. Reducing sugar content of the products was found in very trace amount. Among mineral composition analyzed for the products, calcium content was higher both in jaggery and treacle and phosphorous content (0.1% to 0.13%) was higher in sugarcandy. Among three products magnesium content was also higher in jaggery (0.04% to 0.06%). Iron content ranges from 0.007 to 0.025%, 0.021% to 0.035% and 0.008 to 0.017% in jaggery treacle and sugarcandy respectively.

Keywords: Palmyrah, Nutrient, Proximate, Mineral, Sap