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Palmyrah toddy, which is highly produced in the Northern and Eastern parts of Sri Lanka, is a sugary, weighty, milky white, strongly effervescent, non-distilled product and rich nutrient source containing 0.5-6.0 % (v/v) alcohol, 0.3-0.5 % (v/v) total acidity, total solids, < 1.0% (w/v) total sugar, protein, 0.25 % (w/v) total ash and 39.58 mg L⁻¹ vitamin C (Theivendirarajah and Kumuthini, 1986). In addition to the nutrient content, it also contains a dense population of wild yeast and bacteria. Thus, during the collection of toddy in earthen pots, it undergoes spontaneous fermentation by yeast converting sugars into alcohol. Subsequently, acetic acid fermentation is carried out and then forms acids. Therefore, to prevent further fermentation, and also prolong the shelf life of the toddy, it is preserved by the bottling which includes the steps such as filtration of fresh toddy, bottling, capping, and pasteurization (Mahilrajan *et al.*, 2014).

The alcohol content of fully fermented toddy is around 5 -8% and 39.58 mg/ L vitamin C in the form of L-ascorbic acid is present in the fully fermented toddy (Theivendirarajah, 2008). In addition to this the partially fermented toddy contains considerable amount of live microorganisms, residual sugars mostly glucose and fructose, small quantities of proteins, lipids, minerals, vitamins and organic acids.

Table 05: Nutritional parameters of fresh and bottled toddy

	Nutritional Parameters	Fresh Toddy	Bottled Toddy
1	Reducing sugar (g/100ml)	2.69(±0.01) ^a	2.70(±0.01) ^a
2	Total sugar (g/100ml)	3.04(±0.06) ^a	2.80(±0.01) ^b
3	Fat (g/100ml)	0.02(±0.00) ^a	0.02(±0.00) ^a
4	Protein (g/100ml)	1.41(±0.01) ^a	1.42(±0.01) ^a
5	Ash (g/100ml)	0.18(±0.00) ^b	0.19(±0.00) ^a
6	Ascorbic acid (mg/100ml)	3.0(±0.01) ^a	2.1(±0.01) ^b

Each value in the table is represented as mean ± SD (n = 3). Values in the same rows followed by different letters are significantly different ($p < 0.05$).

Source – Mahilrajan & Thurisingam – Palmyrah Research Institute

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