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Preliminary Phytochemical and Coumarin Content Investigation of Cinnamon Drink Available in the Sri Lankan Market**Padumadasa C.*, Ranasinghe N.P.***Department of Chemistry, University of Sri Jayewardenepura, Sri Lanka***chayanikapadumadasa@yahoo.com***Abstract**

Cinnamon has been used as a spice since antiquity. It is obtained from the inner bark of several species of the genus *Cinnamomum* that belongs to the family Lauraceae. *Cinnamomum zeylanicum* (*Cinnamomum verum*) also known as true cinnamon is a small evergreen tree, native to Sri Lanka, which is commonly known as Kurudu. This is used intensively in traditional medicine and has been reported to possess diverse pharmacological properties. Cinnamon produced in Sri Lanka has acquired a long standing reputation in the international market. Today, there are many value added products of cinnamon in the local and international market. Cinnamon drink is one such value added product of cinnamon, launched in recent years as a nutraceutical drink. Here, we report a preliminary comparative phytochemical and coumarin content investigation of the cinnamon drink samples of two different brands in the Sri Lankan market in comparison to that of true cinnamon. Phytochemical studies were carried out for 80% aqueous ethanolic extract of cinnamon bark, Cinnamon drink samples I and II according to previously published methods. Phytochemical studies of 80% aqueous ethanolic extract of the cinnamon bark revealed the presence of alkaloids, sterols, triterpenes, flavonoids, saponins, tannin and polyphenols and the absence of anthraquinones and cyanogenic glycosides in accordance with previously published data. Similar results were obtained for cinnamon drink samples I and II. According to the US pharmacological and European Union (EU) standards, it is important to determine the coumarin content of cinnamon value added products. Coumarin content of the cinnamon bark, cinnamon drink samples I and II were determined according to previously published HPLC method with some modifications. Coumarin content of cinnamon drink samples I and II were $1.10 \pm 0.12 \text{ mg kg}^{-1}$ (0.0006% by weight) and $3.85 \pm 0.33 \text{ mg kg}^{-1}$ (0.0012% by weight) respectively. While it was below the Limit of Detection (LOD) for true cinnamon bark. Although; coumarin content of cinnamon drink samples I and II were higher than that of true cinnamon bark, they are well below the specification limit of EU. According to the results, it may be suggested that cinnamon drink samples I and II were predominantly derived from true cinnamon and safe for consumption. Further, this method could be extended to other value added products of cinnamon in the Sri Lankan market.

Keywords: *Cinnamomum zeylanicum*, Phytochemical, Coumarin.