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## Comparison of the Quantities of Selected Phytochemicals of the Leaves of Seven Guava Varieties in Sri Lanka

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Guava leaves contain various chemical constituents with significant pharmacological activities such as anticancer, antidiabetic, antimalarial, etc in humans. Eventhough, Sri Lanka is rich with many guava varieties including wild and introduced, no adequate scientific studies have been documented yet based on the guava variety for their phytochemical quantities. Therefore, this study was aimed to determine the quantity of total polyphenolic, flavonoid, tannin and terpenoid content in seven guava varieties namely, *Psidium pomiferum* (Apple-pera), *Psidium guineense* (Embul-pera), *Psidium guajava* (Getta-pera and Common guava) and improved varieties of *Psidium guajava* (Kanthi and Pubudu) and *Psidium guineense* (Costorican) for the purpose of producing a repository to be used for the scientific community and general public. The leaves were collected and authenticated prior to use. The chemical constituents of cleaned and air-dried guava leaves were extracted by maceration with methanol and phytochemical quantifications were carried out spectrophotometrically using standard protocols. Mainly, total polyphenolic and tannin contents were determined by Folin-Ciocalteu method and flavonoid content was determined by AlCl<sub>3</sub> method. Highest polyphenolic and tannin contents were observed in common guava ( $479.29 \pm 2.16$  mg GAE/g and  $437.54 \pm 0.57$  mg TAE/g respectively) with respect to other varieties and lowest value was observed for one of the improved varieties, Costorican ( $352.21 \pm 2.72$  GAE/g and  $323.27 \pm 1.71$  mg TAE/g respectively). The highest value of flavonoid content was observed in Kanthi ( $34.23 \pm 0.05$ mg QE/g). Terpenoid is abundant in apple guava ( $29.29 \pm 0.09$  mM LE/g) compared to other varieties. All the varieties used in this study contain large quantities of pharmacologically important phytochemicals such as phenolics, flavanols, terpenoids and tannins. A slight variation of these phytochemicals is noted among the varieties, however the common guava is rich with all the analyzed phytochemicals in the study. Therefore, further investigations are required to isolate bioactive phytochemicals and respective antioxidant analysis in order to be used them in the nutraceuticals and other pharmacological applications.

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