

Content (mg/100g of fresh matter) for infusion of 25% hibiscus incorporated X black tea/Y black tea and X/Y black tea alone were  $461.18 \pm 9.53$ ,  $329.30 \pm 4.00$ ,  $41.41 \pm 1.33$  and  $115.33 \pm 3.21$  respectively. As a conclusion Total Anthocyanin content was increased in hibiscus incorporated black tea than black tea alone. This results indicate the potential of exploiting this flowers as a source of developing novel functional beverage, while using as a natural colorant.

**PP 046: Synthesis and characterization of hydroxyapatite from Eppawala Rock Phosphate for biomedical applications as a value added product**

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Eppawala chloroapatite deposit is the only commercially available phosphate source in Sri Lanka, which is situated in Anuradhapura district. In this study, it was chemically changed into hydroxyapatite as a value-added product. It is a bioceramic which can be used for applications in orthopedics and dentistry due to its structural similarity with the mineral phase of mammalian bones and teeth. Sol-gel approach was used to synthesize products using diluted Nitric acid under different conditions. Synthesized Eppawala hydroxyapatite powder was characterized using X-ray Fluorescence (XRF), X-ray powder Diffraction (XRD), Fourier-transform Infrared Spectroscopy (FTIR), and Scanning Electron Microscopy (SEM) in order to find out its composition, crystallinity, presence of functional groups, bonding type, surface morphology and micro-structural features, respectively. The FTIR spectroscopy results confirmed the formation of hydroxyapatite from apatite via the presence of hydroxyl groups. Those results coincided with the FTIR results of human and cow bones. The XRD results reflected the formation of a hexagonal crystal structure of hydroxyapatite. Elementary composition and micro-structural features of products were discussed based on the XRF and SEM results of the synthesized hydroxyapatite powder. The study concludes that there is a possibility of producing hydroxyapatite using commercially available Eppawala chloroapatite in Sri Lanka.

**Keywords:** Eppawala chloroapatite, Hydroxyapatite, Bioceramics

**PP 047: A comparison of phytochemical and physicochemical parameters of *Garcinia cambogia* and *Garcinia zeylanica***

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The fruits of *Garcinia cambogia* (*G. cambogia*) and *Garcinia zeylanica* (*G. zeylanica*) (belonging to family: Clusiaceae), look like a small yellowish, greenish, or sometimes reddish pumpkin with thin skin and deep vertical lobes. The colour can vary considerably. When the rinds are dried and cured in