

**PHYTOCHEMICAL SCREENING IN LEAF, PEEL AND
SEED EXTRACTS OF *Annona muricata* (SOURSOP)**

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ABSTRACT

PHYTOCHEMICAL SCREENING IN LEAF, PEEL AND SEED EXTRACTS OF *Annona muricata* (SOURSOP)

In this study, the total phenolics and flavonoids content in *Annona muricata* leaf, peel and seed extracts were identified. The total phenolics or flavonoids content between the three were also compared. The leaf, peel and seed were extracted with ethanol by using plant tissue homogenization method. The extracts were subjected to phytochemical qualitative and quantitative screenings. Preliminary qualitative screenings were performed by using standard chemical tests. Ferric chloride test proved the presence of phenolics when the dark green, dark brown and brown colour of leaf, peel and seed extracts solution turned dark green whereas Shinoda test proved the presence of flavonoids when the dark green, dark brown and brown colour of leaf, peel and seed extracts solution extracts solutions developed into red colour. Next, quantification of total phenolics content and total flavonoids content were determined spectrophotometrically using Folin-Ciocalteu assay and aluminium chloride colorimetric assay, respectively. Total phenolics content in the three parts of *Annona muricata* ranged from 0.10467 ± 0.000577 mg GAE/ g to 0.13800 ± 0.000000 mg GAE/ g. Meanwhile total flavonoids content in the three parts of *Annona muricata* ranged from 0.31700 ± 0.002000 mg CEQ/ g to 0.53367 ± 0.000577 mg CEQ/ g. One-way ANOVA revealed there were significant difference in total phenolics and flavonoids content between the three samples. Phenolics was extracted the highest in peels, followed by seed and then by leaf. Meanwhile, for flavonoids, leaf extracted the highest, followed by seed and then peel.