

**COMPARISON OF TOTAL FLAVONOIDS AND
TANNINS CONTENT IN METHANOL EXTRACT FROM
DIFFERENT PART OF *Melastoma malabathricum***

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ABSTRACT

COMPARISON OF TOTAL FLAVONOIDS AND TANNINS CONTENT IN METHANOLIC EXTRACT FROM DIFFERENT PART OF *Melastoma malabathricum*

Melastoma malabathricum or better known as Senduduk among Malaysians is a type of shrubs that is used in traditional medicine to treat various kind of diseases such as diarrhoea, dysentery, hypertension, diabetes and many kind of skin diseases. This study aims to measure the total flavonoids and tannin content in 70% methanol extract of leaves, stem and fruits from *Melastoma malabathricum* and to identify which part of the plant contain the highest quantity of flavonoids and tannin. Total flavonoids content was measured by Catechol Equivalent (CE) and total tannin content was measured by Gallic Acid Equivalent (GAE). Results showed the level of flavonoids in leaves is 10.6 ± 0.05 mg of CE/g, in stem 3.21 ± 0.01 mg of CE/g and in fruits 3.39 ± 0.02 mg of CE/g. Meanwhile, the level of tannin in leaves is 1.82 ± 0.01 mg of GAE/g, in stem 0.91 ± 0.01 mg of GAE/g and in fruits 1.10 ± 0.02 mg of GAE/g. The result is significant at $p < 0.05$. From both result showed leaves contain higher quantity of flavonoids and tannin compared with stem and fruits. These results may be helpful for rational use of this plant in the modern system of health care.