

P-93**Antioxidant Properties of Standardized Extracts and Fractions of *Morinda Citrifolia* Linn. Fruit**

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Morinda citrifolia Linn. (Rubiaceae) locally known as Mengkudu besar is the plant reported to have a broad range of medicinal use. The purpose of this study is to evaluate antioxidant properties of standardized fruit extracts and fractions using 1,1-diphenyl-2-picrylhydrazyl scavenging activity and β -carotene-linoleate assays and to identify the major chemical constituents of the active fractions using GC-MS analysis. The total phenolics and total flavonoids content of the fruit were also evaluated. The result showed the ethyl acetate fraction of the fruit possessed the highest bleaching ability with EC₅₀ value of 164.09 ug/mL and the fraction was found to have the highest antioxidant property ($83.46 \pm 0.27\%$ at 500 ug/mL) in β -carotene-linoleate system. Ethyl acetate fraction also has the highest total phenolics content (167.71 ± 5.30 ug/mL GAE) and total flavonoids content (22.30 ± 1.22 ug/mL QE). Three major compounds present in ethyl acetate fraction were identified as octanoic acid (16.45%), pentanoic acid (10.12%) and 2,4-bis(1,1-dimethylethyl) phenol (9.50%). In conclusion, the ethyl acetate fraction of *Morinda citrifolia* fruit can be an alternative source of polyphenolics with potent antioxidant activities.

Keywords: *Morinda citrifolia* Linn., standardized extracts and fractions, antioxidant, GC-MS.
