

ABSTRACT

In Vitro Antimalarial Activity of n-Hexane Extract, Chloroform Extract, and 96% Ethanolic Extract of *Morinda citrifolia* L. Leaves Against *Plasmodium falciparum*

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The study was aimed to evaluate the in vitro antimalarial activity of n-hexane extract, chloroform extract, and 96% ethanolic extract of *Morinda citrifolia* L. leaves. The n-hexane, chloroform, and 96% ethanolic extracts were obtained by multiple maceration of powdered dried *M. citrifolia* L. leaves and the assay was done using 3D7 strain of *Plasmodium falciparum*. The concentration of test solutions were 100 µg/mL, 10 µg/mL, 1 µg/mL, 0,1 µg/mL, and 0,01 µg/mL. Among the extracts, chloroform extract showed active antimalarial activity with IC₅₀ value of 12,20 µg/mL, while n-hexane and 96% ethanolic extracts showed inactive antimalarial activity with IC₅₀ > 100 µg/mL.

Keywords: *Morinda citrifolia*, *Plasmodium falciparum* 3D7, antimalarial activity, in vitro