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ABSTRACT

IN VITRO ANTIMALARIAL ACTIVITY OF ETHANOLIC EXTRACT OF NONI'S LEAF (Morinda citrifolia) AGAINST PLASMODIUM FALCIPARUM

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Malaria remains one of worldwide concerns with over 200 millions of new cases and more than 400.000 deaths in 2015. Drug resistance has been frequently reported in many regions all around the world. Those reports suggest that there is still an alternative needed for Malaria's medication, preferably from natural origin. Noni (*Morinda citrifolia*) is a plant which is familiar in Indonesia. It has antioxidant, antifungal, antiinflamation, analgetic, and antiviral activities. This study aims to evaluate the in vitro antimalarial activity of ethanolic extract of *Morinda citrifolia* leaves. The extract was obtained by multiple maceration of *M. citrifolia* leaves with 70% etanol as its solutant. The in vitro assay was done using 3D7 strain of *Plasmodium falciparum* with consentration of extracts were 100; 10; 1; 0,1; and 0,01 μg/mL. Antimalaria activity result on noni's leaves was calcutated using probit analysis and showed the value of IC₅₀ 22,68 μg/mL which can be concluded as active in antimalaria.

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