STUDY OF ANTIMALARIAL ACTIVITY AGAINST OF TWO BIFLAVONOID COMPOUND FROM GARCINIA; 5,7,4',3'',5'',7'',12-HepthaHydroxyl-12-MethylHydrofuran-(3''',4''')-3,8''-Biflavanon and 2'''-O-Methyl Morelloflavon

Name : Ariesta Putri Rahmadani
NRP : 14076 100 063
Advisor Lecturer : Prof. Dr. Taslim Ersam

Abstract

Antimalarial activity of biflavonoid compounds are 5, 7, 4', 3'', 5'', 7'', 12 hydroxy-hepta hydrofuran-12-methyl-(3''', 4''')-3, 8''-biflavanon (1) and 2'''-O-methyl Morelloflavon (2) from Garcinia species have been investigated. In-vitro antimalarial activity testing have been conducted to P. falciparum. DMSO is used as a negative control, after that made in five concentrations (0.001, 0.01, 0.1, 1, and 10 μg/mL) with testing compounds. Antimalarial activity can be determined by observing the number of infected erythrocytes by parasites per 1000 erythrocytes and analyzed using probit SPSS 16.0. IC₅₀ results are comparison with chloroquine compound (IC=0.035 μg/mL). Compounds (1) is 0.046 μg/mL and 0.033 μg/mL of compound (2). It can be concluded that compound (2) is more active than compound (1).

Keywords: Antimalarial, biflavonoid, Garcinia, in vitro