

Aktivitas Antimalaria (*Plasmodium falciparum* 3D7) dari Spon Laut *Acanthella* sp.

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ABSTRAK

Penelitian ini bertujuan untuk mendapatkan kandidat bioaktif anti multiresisten malaria dari bioaktif spon laut *Acanthella* sp.. Tahap penelitian diawali dengan mengisolasi senyawa dari *Acanthella* sp.. Selanjutnya dilakukan uji antimalaria secara invitro terhadap *Plasmodium falciparum* 3D7. Pengujian terhadap *P. falciparum* strain 3D7 menggunakan dosis konsentrasi bertingkat dengan kontrol positif digunakan *chloroquin*. Perhitungan penghambatan skizon dilakukan dengan pewarnaan darah dan selanjutnya dihitung jumlah eritrosit yang terinfeksi per 1000 eritrosit. IC50 dihitung menggunakan analisis probit. Hasil penelitian menunjukkan bahwa keempat fraksi aktif menunjukkan penghambatan pertumbuhan *P. Falciparum* dengan nilai IC50 yang berbeda-beda. Nilai terbaik dihasilkan oleh fraksi B dengan IC50 sebesar 0,013 ppm.

Kata kunci: Antimalaria, *Plasmodium falciparum* 3D7, *Acanthella* sp.

ABSTRACT

The objective of the research was to get the bioactive candidates from marine sponge *Acanthella* sp. for anti multiresisten malaria. The first Research was conducted with isolating the active compounds of *Acanthella* sp.. In vitro antimalarial test against *Plasmodium falciparum* 3D7 was done with several concentrations with positive control using chloroquinon. The quantification of the Scizon inhibition was performed with blood staining. Afterward, the infected erythrocytes per 1000 erythrocytes was calculated. IC50 was assayed with probit analysis. The result indicated that all four active fractions showed inhibition on growth of *P. Falciparum* with different value on IC50. The best fraction is confirmed by fraction B with IC50 of 0.013 ppm.

Key word: Antimalarial, *Plasmodium falciparum* 3D7, *Acanthella* sp.

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