Efek pemberian secara oral kombinasi ekstrak akar pasak bumi (eurycoma longifolia) dan ACT (artemisinin combination therapy) sebagai antimalaria pada mencit (Mus musculus) yang terinfeksi plasmodium berghei = The effect of oral administration combination of the extract of pasak bumi s root eurycoma longifolia and ACT artemisinin combination therapy as anti malaria in mice (Mus musculus) infected by plasmodium berghei

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Abstrak

[Munculnya fenomena resistensi dari berbagai obat malaria yang telah digunakan untuk melawan penyakit malaria merupakan suatu ancaman bagi dunia kesehatan untuk mencari terobosan baru dalam melawan penyakit malaria. Salah satunya dengan strategi pengobatan secara kombinasi. ACT (Artemisinin Combination Therapy) obat standar sebagai antimalaria. Ekstrak tanaman Akar Pasak Bumi (Eurycoma longifolia) diketahui memiliki potensi antimalaria. Dalam penelitian ini bertujuan menguji kombinasi ekstrak Akar Pasak Bumi (PB) dan ACT. Dengan menguji 2 dosis terdiri dari PB 60mg/kgBB tambah ACT 1.7 mg/kgBB; PB 75 mg/kgBB tambah ACT 1.7 mg/kgBB. Desain penelitian ini menggunakan eksperimental in vivo pada mencit (Mus musculus) yang terinfeksi Plasmodium berghei. Berdasarkan hasil analisa peningkatan parasitemia hari ke-4 menggunakan SPSS menunjukkan hasil tidak bermakna (p>0.05) pada kedua kelompok uji ketika dibandingkan dengan kontrol positif (ACT). Hal ini ditunjang dengan presentase inhibisi kedua kelompok (68.4%;54.46%) lebih kecil daripada kontrol positif (70%). Dapat disimpulkan bahwa kedua dosis kombinasi tidak bersifat sebagai antimalaria. Kombinasi dosis ekstrak akar pasak bumi 60 mg/kgBB dan ACT 1.7 mg/kgBB merupakan kelompok yang memiliki presentase daya hambat yang paling baik berdasarkan presentase daya hambat pada hari ke-4.;The emergence of the phenomenon of resistance from the malaria drug that has been used to combat malaria is a threat to the health of the world to search for new breakthroughs in the fight against malaria. One way by using combination treatment strategies. ACT (Artemisinin Combination Therapy) is a standard drug as anti-malaria. The extract of Pasak Bumi root (Eurycoma longifolia) had been known to have anti-malaria potency. This study aimed to test a combination of the extract of Pasak bumi root and ACT. By testing two doses consisting of PB 60 mg/kgBB and ACT 1.7 mg/kgBB; PB 75 mg/kgBB and ACT 1.7 mg/kgBB. Design of this study using an experimental in vivo in a mice (Mus musculus) infected by Plasmodium berghei. Based on the analysis of the increase in parasitemia day 4 using SPSS shows the results are not significant in both groups combination compared with positive control (ACT). It is supported with a percentage of inhibition of the two groups (68.4%;54.46%) is smaller than the positive control(70%). It can be concluded that both of doses combination is not as anti-malaria. Doses combination of PB 60 mg/kgBB and ACT 1.7 mg/kgBB has the best percentage of inhibition parasitemia, The emergence of the phenomenon of resistance from the malaria drug that has been used to combat malaria is a threat to the health of the world to search for new breakthroughs in the fight against malaria. One way by using combination treatment strategies. ACT (Artemisinin Combination Therapy) is a standard drug as anti-malaria. The extract of Pasak Bumi root (Eurycoma longifolia) had been known to have anti-malaria potency. This study aimed to test a

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