ANTI-PLASMODIUM ACTIVITY OF ETHANOLIC EKSTRACT KENIKIR (Cosmos caudatus Kunth) IN MICE INDUCED BY Plasmodium berghei

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ABSTRACT

Cosmos caudatus is a plant that is rich in benefits that are found in Indonesia. This study aims to determine the antiplasmodial activity of ethanol extract of C. caudatus leaves, on mice induced by *P. berghei. C. caudatus* leaves were extracted using the maceration method with an ethanol solvent. Test mice were divided into 5 groups, positive control group given chloroquine 10 mg/kgbw, negative control, dose 50 mg/kgbw, 100 mg/kgbw, and 200 mg/kg BW. The antiplasmodial activity was assessed by percent inhibition of *P. berghei* on the 8th day. The highest percentage of inhibition of P. berghei was obtained at a dose of 50 mg/kgbw which was 92.01%, followed by a dose of 100 mg/kgbw at 71.73% while the lowest yield was at a dose of 200 mg/kgbw of 63.24%. The difference in results at each dose can be influenced by hepatotoxic effects and the occurrence of oxidative stress. IC₅₀ results obtained 268,611 mg/kgbw. This research shows that ethanol extract *C. caudatus* leaf has the highest antiplasmodial activity at low doses.

Keywords: Cosmos caudatus Kunth, antiplasmodial, Plasodium berghei

