ABSTRACT

ANTIMALARIAL ACTIVITY OF ALKALOID SUBFRACTION FROM C.8.A SEPARATION CHLOROFORM EXTRACT OF CASSIA SPECTABILIS DC. LEAVES

The chloroform extract of Cassia spectabilis’ leaves, one of the Cassia family, is proven has an antimalarial activity against Plasmodium falciparum. The aim of this research is to know the activity of the alkaloid subfraction, which separated from the chloroform extract, against P. falciparum by in vitro method. The separation of the chloroform extract achieved by column chromatography then continuing by thin layer chromatography. The subfraction then be tested to the parasite by 48-h test method and been observed under light microscope to count the inhibitory percentage. The inhibitory concentration to inhibit 50% percent from the total parasite (IC$_{50}$) is 0.013 µg/mL and can be categorized as a strong antimalarial activity. It also shown that the subfraction has an effect to the parasite’s stage morphology.

Keyword : antimalarial activity, alkaloid, Cassia spectabilis DC. leaves