

ABSTRACT

**ANTIMALARIA ACTIVITY OF ETIL ACETATE FRACTION-96
AND ETIL ACETATE FRACTION-70 *ANDROGRAPHIS
PANICULATA* NEES HERB ON *PLASMODIUM BERGHEI*
INFECTED MICE *IN VIVO***

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The issue of resistance in malarial infection makes development of novel drugs a necessity. An alternative source for discovering such drugs is natural products. *Andrographis paniculata* Nees which known as sambiloto was traditionally used for antimalaria in Indonesia. Therefore, the aim for this study was to develop *A. paniculata* as a new phytopharmaceutical drug. The study was began for determining antimalaria acitivity of raw material product. The material are Etil Asetat fraction that obtained from ethanol extract 96% and ethanol extract 70% of *A. paniculata* herbs. Then comparing between the two materials that give better activity determined by the value of each ED₅₀ as reference to be manufactured as phytopharmaceutical drug. *In vivo* antimalarial assay on *Plasmodium berghei* infected mice was carried out by oral administration, twice a day for four consecutive days based on Peter's 4 days suppressive test. Each EA fraction was given at a dose which equal to 6.25; 12.5; 25; and 50 mg andrographolide per kg mice body weight. The observation was done for a week (H₀-H₆) and everyday thin films were made from the tail blood of each mouse.

The parasitemia level was determined by counting the number of parasitized erythrocytes out of 1000 normal erythrocytes in random fields of the microscope. Antimalarial test results showed that antimalarial activity of EA fraction-96 higher than EA fraction-70 with ED₅₀ 4.216 mg/kg BW and 6.747 mg/kg BW respectively.

Keywords: *Andrographis paniculata* Ness; Ethyl Acetate Fraction; EA fraction 96%; EA fraction 70%; *in vivo* antimalarial activity; *Plasmodium berghei*; ED₅₀

