ABSTRACT

THE INFLUENCE OF GIVING MAHKOTA DEWA (Phaleria macrocarpa) EXTRACT AGAINST DYMETHYLBENZ(α)ANTHRACENE (DMBA) INDUCED HEPAR HISTOPATHOLOGY APPEARANCE IN Sprague dawley RATS

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Mahkota dewa (*Phaleria macrocarpa*) is one type of plant that originated from island of Papua but able to live well in other place. It reported to have various biological activities as hepatoprotector. *Phaleria macrocarpa* (PM) contain flavonoid and polifenol which are neutralize free radicals because of their antioxidant and antiinflammatory activity.

The aim of this research was to determine the influence of giving etanol 70% extract of Mahkota dewa fruit. In this study, twenty five rats (Rattus novergicus) Sprague dawley strain devided into five groups and given treatment for 14 days. G1 (only given aquadest), G2 (only given DMBA 30 mg/BW), G3 (given DMBA and PM extract 24 mg), G4 (given DMBA and PM extract 48 mg), G5 (given DMBA and PM extract 96 mg).

Result showed that total average of inflammation in G1 was 1,08; G2: 3,32; G3: 2,92; G4: 2,28; G5: 1,84. The conclusion of this research is that Mahkota dewa extract 24 mg, 48 mg, and 96 mg could act against DMBA-induced hepar inflammation in rats by mechanism related to its antioxidant and antiinflammatory properties.

Keywords: antioxidant, dmba, hepar, Phaleria macrocarpa