

## **ABSTRACT**

### **EFFECT OF ETHANOL EXTRACT OF MAHKOTA DEWA FRUIT (*Phaleria macrocarpa*) IN HISTOPATHOLOGY OF BREAST TISSUE OF FEMALE WHITE RATS (*Rattus norvegicus*) *Sprague dawley* STRAIN INDUCED 7,12-DIMETHYLBENZ( $\alpha$ )ANTHRACENE (DMBA)**

**By**

**MONICA SHENDY**

Chemical carcinogen 7,12-dimethylbenz( $\alpha$ )anthracene (DMBA) is a member of polycyclic aromatic hydrocarbons (PAH) that possess cytotoxic, carcinogenic, mutagenic, and immunosuppressive. DMBA acts as a potent carcinogen materials by producing a wide variety of reactive metabolites that lead to oxidative stress. This research had done to determine the effect of fruit extracts mahkota dewa to histopathology of breast tissue induced by DMBA. This research is experimental study with post-test-only control group design of the 25 rats divided into five groups. DMBA 30 mg/kgBW single dose administered intraperitoneally to groups 2, 3, 4, and 5 then waited for 2 months, then groups 3, 4, and 5 mahkota dewa extract peroral dose of 24 mg, 48 mg, and 96 mg for 14 days. Breast tissue samples were taken for histopathological examination, the results showed an increase of the number of acini around intralobular ducts. Group 3, 4, and 5

showed the different average number of acini, however it can not be determined which dose of the mahkota dewa extract gives the best result.

Keywords: DMBA, mahkota dewa, number of acini, *Phaleria macrocarpa*.