

## ABSTRACT

### **The Effect of *Phaleria macrocarpa* (Scheff.) Boerl. Fruit Against 7,12-Dimethylbenz[*a*]anthracene (DMBA)-Induced on Lung Histopathology Appearance in Rat**

**By:**

**MONICA LAURETTA**

*Phaleria macrocarpa* fruit has been studied that it contains of high concentrate of flavonoids as natural antioxidants that inhibit the formation of free radicals. The aim of this research is to determine the influence of giving ethanol extract of *Phaleria macrocarpa* fruits against 7,12-Dimethylbenz[*a*]anthracene (DMBA)-induced lung histopathology appearance in rat. In this study, 25 female rats were divided randomly into 5 groups then adapted for 7 days and given treatment for 15 days. K1 (normal control was only given aquadest), K2 (positive control was only given DMBA 30 mg/kgBW), K3 (given DMBA 30 mg/kgBW and extract of *Phaleria macrocarpa* fruits 120 mg/kgBW), K4 (given DMBA 30 mg/kgBW and extract of *Phaleria macrocarpa* fruits 240 mg/kgBW) and K5 (given DMBA 30 mg/kgBW and extract of *Phaleria macrocarpa* fruits 480 mg/kgBB). Results showed that the total average of pulmonary alveolar inflammatory cell infiltration in K1:  $6,60 \pm 1,140$ ; K2:  $13,80 \pm 0,837$ ; K3:  $12,20 \pm 0,837$ ; K4:  $10,80 \pm 0,837$ ; and K5:  $9,40 \pm 1,140$  (decreasing in comparison with K2). The conclusion of this research is that extract of *Phaleria macrocarpa* fruits can decrease total of pulmonary alveolar inflammatory cell infiltration on DMBA-induced lung in rat.

**Keywords:** DMBA, inflammatory cell, lung histopathology appearance, *Phaleria macrocarpa* (Scheff.) Boerl.