

## ABSTRACT

Smoking is a common thing for most Indonesia society, especially men. According to Riskerdas, smoking habit of people who is above 15 years old has not been decreased from 2007 to 2013. In fact, it has been increased from 34.2 percent in 2007 to 36.3 percent in 2013. The purpose of this research was to analyze the difference between HbCO level and histopathology alveolar male wistar rats lungs which had been treated and untreated by using Melon extract. This study was laboratory experiment by using Post Test Control Group Design Research and RAL method (Complete Randomize Design).

This study was divided into 5 groups with 5 different treatment that was The control group, The treatment group were given treatment of cigarette smoke, The treatment group were given treatment in the form of exposure to cigarette smoke and extract of melon (*Cucumis melo*) orally at a dose of 3 IU / day, at a dose of 4.5 IU / day, and at a dose of 9 IU / day. The sample of this research were 25 male Wistar rats. The sample size used Federer formula. The collection of data was obtained from the results of laboratory tests to HbCO and pulmonary alveolar histopathology. The results of this research was tested statistically by using Manova test by 95% confidence level which used SPSS program 16.0 version. The research results showed that there were significant difference between the average levels of HbCO (p-value = 0.000) and the mean number of lung alveolar makrovag male Wistar rats (p-value = 0.000) which have been treated and untreated by using melon extract. Advice for the public is about the importance of melon extract antioxidant 1x250 IU/day and the importance for having free smoking area.

Keywords: Smoke, Melon Extract, HbCO, Alveolar Macrophages,