ABSTRACT

ORNELLA ZYNESHA. Toxicopathology Study of Black Seed Oil Extract (*Nigella sativa*) on Liver and Kidney of Mice (*Mus musculus*). Under direction of DEWI RATIH AGUNGPRIYONO and SRI ESTUNINGSIH.

This study was aimed to get information about blackseed (*Nigella sativa*) toxicity on liver and kidney of mice. Seventy two mice (36 male and 36 female) of 4 weeks old mice were divided into four group, each group consist of nine mice. Group K was negative control (received aquadest 0.1 ml), group HS 0.1 (received 0.1 ml blackseed oil), group HS 0.2 (received 0.2 ml blackseed oil), and group HS honey (received 0.3 ml combination of blackseed oil and honey). The treatment was done for two months. Afterwards mice were euthanized by atlanto-occipitalis dislocation and followed with necropsy to collect tissue samples (liver and kidney). The tissue samples were processed to prepare histopathology slides with Hematoxilyn-Eosin stain. The parameters observed include to count and differentiate of the degenerative and necrosis of the liver and kidney cell using software Image J® for Microsoft® Windows®. Quantitative data were analyzed with software SPSS® 16.0 for Microsoft® Windows® ANOVA test and followed by Duncan test. The result showed that habbatussauda caused increase of normal liver and kidney cell on group HS 0.1, HS 0.2, and HS honey which were significant (p<0.05) compared with the control group.

Keywords: Habbatussauda, liver toxicopathology, kidney toxicopathology