

ABSTRACT**Effect of Extracts of Black Cumin (*Nigella sativa*) against Inducible Nitric Oxide Synthase Expression (iNOS), Blood Levels of SGOT and SGPT on Carbon Tetrachloride-induced Liver Rat (*Rattus norvegicus*)****Ira Humairah**

Inflammation of the liver is the beginning of a process that will lead to changes in tissue fibrosis, leading to cirrhosis of the liver. The explosion of cell respiration process during the inflammatory phase causes the formation and release of free radicals, including the production of reactive oxygen species (ROS) and reactive nitrogen species (RNS). Several studies using carbon tetrachloride were injected intraperitoneal in liver rats to stimulate the inflammatory process in the liver that will cause oxidative stress and increased production of RNS and ROS. Inflammatory process is analogous to the process of inflammation due to a viral infection of the liver cells. Nitric oxide is produced in large amounts by the inducible nitric oxide synthase (iNOS), which arise due to the inflammatory process. The aim of this study was to evaluate antioxidant activity of *Nigella sativa extract* towards CCl₄-induced liver *Rattus norvegicus*. Ko was treated with Na-CMC 0,5% and *vegetable oil*, K1; with CCl₄-induced liver without black cumin extract, K2; with CCl₄-induced liver without black cumin extract dose 0,6 mg/KgBB, K3; with CCl₄-induced liver without black cumin extract dose 1,2 mg/KgBB, and K4 with CCl₄-induced liver without black cumin extract dose 2,4 mg/KgBB. In conclusion, black cumin extract has antioxidant effects on the CCl₄-induced liver *Rattus norvegicus* by decrease the expression of iNOS.

Keywords : *Nigella sativa*, CCl₄-induced liver, iNOS, inflammation, antioxidant.