ABSTRACT

EFFECT OF THE BLACK CUMIN EXTRACT (Nigella sativa) IN THE ACTIVITY OF ENZYMES Alanine Aminotransferase (ALT) IN MALE Sprague dawley RATS WITH ETHANOL 50%-INDUCED

By

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Black cumin (Nigella sativa) has content active main, thymoquinone, which reported can prevent damage hepar in rats with mechanism as antioxidant and antiinflammation. Alcohol can cause damage on cell hepar. Damage of the hepar can be known by measuring the activity of enzymes Alanine Aminotransferase (ALT). The aim of this research is to know the effect of the black cumin extract (Nigella sativa) in the activity of enzymes Alanine Aminotransferase (ALT) in male Sprague dawley rats with ethanol 50%-induced.

This research used post test only control group design with 30 Sprague dawley rats as sample were randomly divided into 3 groups: a control group (K1), a group was induced ethanol 50% peroral (K2) and a group was given black cumin extract (Nigella sativa) 450 mg/Kg/day peroral 2 hours before ethanol 50%-induced peroral (K3). All treatments were given once a day for period 10 days. Data tested by Kruskal wallis.

The result showed that the increasing in the activity of enzymes Alanine Aminotransferase (ALT) were statistically reduced with treatment of the black cumin extract (Nigella sativa) than group with only ethanol 50%-induced peroral (p=0.027).

Conclusion of this research is the black cumin extract (Nigella sativa) has effect to reduce in the increasing of the activity of enzymes Alanine Aminotransferase (ALT) in male Sprague dawley rats with ethanol 50 %-induced for 10 days.

Keywords: Nigella sativa, ethanol 50%, Alanin Aminotransferase, antioxidant.