

## Phytochemical Screening, Antioxidant and Hepatoprotection Assessment of Extracts of *Coriandrum sativum* L. on Wistar Rats

**Authors :** Hiba T. Allah ALtieb Gusm ALSied, Amna Beshir Medani Ahmed, Ikram Mohamed ELtayeb, Saad Mohamed Hussein Ayoub

**Abstract :** This study was carried out to determine the hepatoactivity and the antioxidant activity of *Coiradrum sativum* L. aerial part and fruit extracts against CCL4 induced acute liver damages in Wistar rats. The aerial parts and fruits part of the plant were extracted 96% ethanol with soxhlet apparatus. Hepatic injury was achieved by subcutaneous injection of 3 ml/kg of CCL4 diluted with olive oil with ratio 1:1. The extracts were mixed together 1:1 ratio and given in different doses 100,200,400 mg/kg/day for 5 days under CCL4 induction at 3rd day. The significance of differences between means by using T-test was compared among the groups. The mixture of the two extracts didn't show any significant result in protecting liver injury (antagonistic effects), it shows high level of liver enzyme like alkaline phosphatase (ALP), glutamate oxaloacetate transaminase (SGOT) and glutamate pyruvate transaminase (SGPT). Serological studies further confirmed the results. The results obtained were compared with silymarin (70 mg/kg/day) orally, the standard drug for hepatoprotection which show recovery close to normalization almost like that of silymarin; therefore, further studies on this plant with different ratios especially in isolated tissue to spot more light on antagonistic effects of the two extracts. Antioxidant activity of the extracts was determined by the DPPH method. The results obtained show high anti-oxidant activity for fruits extract while slight or moderate antioxidant activity to aerial extracts.

**Keywords :** antioxidant, aerial part, *Coriandrum sativum* L., fruity, hepatoprotection, Silymarin, phytochemical screening

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