Effect of Aqueous Extract of *Capparis spinosa* on Serum Antioxidant Status in Paracetamol Treated Rats

Hussain I. AL-Khan

*Department of Biology*
*College of Science*
*Mosul University*

(Received 3/1/2010; Accepted 26/4/2010)

**ABSTRACT**

Protective effect of aqueous extract of *Capparis spinosa* was studied on paracetamol induced liver damage in rats by administrating the rats with 1gm/kg of body weight of paracetamol for 21days. Pretreatment rats with 100 and 200 mg/kg of body weight of *Capparis spinosa* extract protected rats against paracetamol liver injury lead to significantly increasing of reduced glutathione (GSH), catalase (CAT) and superoxide dismutase (SOD), and significantly lowering lipid peroxidation (LPO), manoldialdehyde (MDA), cholesterol and triglyceride levels.

The elevation in GSH, CAT and SOD and reduction LPO and MDA by using aqueous extract of *Capparis spinosa* comparing with positive control and returning the biochemical parameters to normalization indicated that the aqueous extract of *Capparis spinosa* posses strong protective property against paracetamol-induced liver damage in rats.

**Keywords**: *Capparis spinosa*, paracetamol, antioxidant enzymes, lipid peroxidation, liver induced damage.
SOD, CAT, GSH, and SODCAT, GSH, and CAT. Lipoxygenase (LOX) and metalloproteinase (MMP) activities were increased in Capparis spinosa, while the activities of SOD, CAT, and GSH were decreased. The activities of MDA, LPO, and MDA were decreased in the hepatotoxicity caused by Capparis spinosa. This study provides evidence for the antioxidant and hepatoprotective effects of Capparis spinosa.