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# An Investigation of Hepatoprotective Activity of Methanolic extract of *Ziziphus jujuba* on Experimentally Induced Ethanol Hepatotoxicity in Rats

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**Abstract :** This study investigated the hepatoprotective activity of aqueous extract of *Ziziphus jujuba* leaves against ethanol-induced liver injury in experimental rats. *Ziziphus jujuba* has been traditionally used in the Ayurvedic system of medicine as a chief ingredient in many polyherbal formulations as an antioxidant. The present study sought to evaluate the protective effect of orally administered methanolic extracts (150 and 300 mg/kg/day b.w, p.o) for 21 days on ethanol induced oxidative stress. Silymarin (100 mg/kg p.o.) was used as a standard reference. The following serum parameters such as Serum Glutamate Oxaloacetic Transaminase (SGOT), Serum Glutamate Pyruvate Transaminase (SGPT), total and direct bilirubin, Total Protein (TP) and tissue antioxidant levels such as Glutathione (GSH) and Lipid Peroxidation (LPO) were evaluated and on the basis of the study we conclude that the control group did not exhibit increase in serum parameters, but ethanol toxicant group showed significant increase in serum parameters, Silymarin and aqueous extract of *Z. jujuba* (150 mg/kg p.o, 300 mg/kg p.o.) treated groups showed significant decrease in serum parameters.

**Keywords :** Hepatoprotection, *Ziziphus jujuba*, Total protein, Lipid peroxidation.

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