Hepatoprotective activity of methanol extract of *Litsea glutinosa* against hepatotoxin induced toxicity

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Abstract

Hepatoprotective activity of the methanol extract of *Litsea glutinosa* (MELG) was investigated by inducing hepatotoxicity with CCl_4 and paracetamol in rats. Increased levels of biochemical parameters like aspartate transaminase, alanine transaminase, bilirubin and alkaline phophatase in serum, along with reduced activity of catalase and super oxide dismutase in liver were induced by paracetamol and CCl_4. Hepatic tissue architecture was also distorted by the hepatotoxins. Oral administration of MELG (100-200 mg/kg) offered a significant dose dependent protection against paracetamol and CCl_4 induced hepatotoxicity and restored the levels of the biochemical parameters to control levels. The hepatoprotective activity of MELG against paracetamol and CCl_4 was comparable with silymarin, which was used as reference standard. The results of this study indicate that MELG has potent hepatoprotective action against paracetamol and CCl_4 induced hepatic damage in rats.

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