

The Infona portal uses cookies, i.e. strings of text saved by a browser on the user's device. The portal can access those files and use them to remember the user's data, such as their chosen settings (screen view, interface language, etc.), or their login data. By using the Infona portal the user accepts automatic saving and using this information for portal operation purposes. More information on the subject can be found in the Privacy Policy and Terms of Service. By closing this window the user confirms that they have read the information on cookie usage, and they accept the privacy policy and the way cookies are used by the portal. You can change the cookie settings in your browser.

Polski English

Login or register account



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

Nilanjan Ghosh, Rituparna Chaki, Mahadeb Pal, Subhash C. Mandal

Source

Oriental Pharmacy and Experimental Medicine > 2016 > 16 > 2 > 139-146

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 phosphatase 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.

Identifiers

journal ISSN : 1598-2386

journal e-ISSN : 2211-1069

DOI 10.1007/s13596-016-0221-2

Authors



Nilanjan Ghosh

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences, Durgapur, India



Rituparna Chaki

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences, Durgapur, India



Mahadeb Pal

Calcutta University, Division of Molecular Medicine, Bose Institute, Kolkata, India



Subhash C. Mandal

Jadavpur University, Pharmacognosy and Phytotherapy Research Laboratory, Division of Pharmacognosy, Department of Ph...

Keywords

Paracetamol, CCl_4 Hepatoprotective activity Antioxidant activity DPPH Silymarin

Additional information

Copyright owner: Institute of Korean Medicine, Kyung Hee University and Springer Science+Business Media Dordrecht, 2016

Publication languages: English

Data set: Springer

Publisher

Springer Netherlands

Fields of science

No field of science has been suggested yet. 



© 2015 Interdisciplinary Centre for Mathematical and Computational Modelling