Phytochemical and Biological Evaluation of Cichorium intybus L. Seeds

Noha Mostafa Fathallah Fathi Mohamed ,Mokhtar Bishr, Abdel Nasser Singab, and Osama Salama

Abstract

In this study, we aim to demonstrate, separately, the hepato-protective activity of the total ethanolic extract as well as the defatted ethanolic extract of Cichorium intybus L., using adult Wister albino rats (120-170 g) as the experimental animals. The total as well as the defatted alcoholic extracts of Cichorium intybus L., seeds possess significant hepato-protective activity; which may be attributed to the individual or combined effects of the phytoconstituents of each extract separately. In this study, hepatic injury caused by carbon tetra chloride, was analyzed through estimation of AST (GOT), ALT (GPT), albumin and platelets in blood samples taken from the veins of orbital plexus of each animal as well as the histopathological examination of the liver. The effects of the extracts were comparable with standard drug silymarin. On the other hand a GC-MS analysis was performed on the fatty acid composition of the lipoidal fraction for the seeds. The separated fatty acids were converted to their methyl ester and then subjected to the analysis.

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