



Phytochemical Screening and Hepatoprotective Potential of *Sida cordata*

Sunil Mistry^{1*}

¹Apex Institute of Pharmacy, Samaspur, Chunar, Mirzapur UP 231304, India.

Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i43A32512

Editor(s):

(1) Dr. Sawadogo Wamtinga Richard, Ministry of Higher Education, Scientific Research and Innovation, Burkina Faso.

Reviewers:

(1) Chinky Goyal, Shri Krishna Ayush University, India.

(2) Cristina B. Colloca, Universidad Nacional de Tierra del Fuego (UNTDF), Argentina.

Complete Peer review History: <https://www.sdiarticle4.com/review-history/73252>

Original Research Article

Received 23 June 2021

Accepted 03 September 2021

Published 08 September 2021

ABSTRACT

Sida cordata (Burn. f.) Borss. Waalk is highly distributed in entire part of India. The various parts of the plant are used in folklore medicine for the management of multiple diseases. So, the present study was performed to examine the hepatoprotective activity study of ethanolic extract of *S. cordata* leaves (SCLE) on alcohol mediated hepatotoxicity in a rat model. Ethanol intoxicated rats showed noteworthy elevation of liver weight and volume. Further, ethanol insulted rats also showed significant elevation in the level of biochemical markers such as AST, ALT, TG, TB, and DB) and marked variation in the histological structure of liver. Oral administration of SCLE at the dose of 200 and 400 mg/kg for 30 days significantly reduced the liver weight, hepatic markers level and restored the histological changes annoyed by ethanol thus indicating its hepatoprotective potential. Furthermore, HPTLC analysis was performed for the identification and quality estimation of *S. cordata* leaves

Keywords: Albino rats; alcohol; hepatoprotective activity; HPTLC fingerprints; *Sida cordata*.

1. INTRODUCTION

The liver is a vital organ involved in the regulation of a wide range of physiological

functions in the human system. It orchestrates various processes such as metabolism, synthesis, and production of various enzymes, and detoxification of toxins. Thus liver damage

*Corresponding author: E-mail: mistrysunil80@gmail.com;