



177 | 4 | 0  
Views | CrossRef citations to date | Altmetric

Original Articles

# Protective Effects of *Tridax procumbens* Linn. Leaves on Experimentally Induced Gastric Ulcers in Rats

Susheela Jhariya, Gopal Rai, Awesh K. Yadav, Alok Pal Jain & Santram Lodhi

Pages 308-320 | Received 16 Jun 2014, Published online: 25 Mar 2015

Cite this article <https://doi.org/10.1080/10496475.2014.973083>



Sample our  
Food Science & Technology  
Journals  
>> [Sign in here](#) to start your access  
to the latest two volumes for 14 days

Full Article

Figures & data

References

Citations

Metrics

Reprints & Permissions

Read this article

Share

## Abstract

The gastroprotective activity of ethanol extract of *Tridax procumbens* leaves was evaluated in rats. Luteolin, a flavonoid, was isolated from ethanol extract of *T. procumbens* by column chromatography. Gastric ulcers were induced by ethanol and indomethacin in rats, and the ulcer index, percent inhibition, gastric content, and total acidity on the gastric lesions were determined. The phytochemical study revealed the presence of flavonoids, glycosides, proteins, and tannins in the ethanol extract. The total flavonoid content was found to be  $142.6 \pm 6.38 \text{ mg} \cdot (100 \text{ gm})^{-1}$  of ethanol extract. The ethanol extract with  $400 \text{ mg} \cdot \text{kg}^{-1}$  produced dose-dependent inhibition on the ulcer lesion index ( $9.76 \pm 0.06$ ), changes in the gastric volume ( $4.38 \pm 0.89$ ), and pH ( $4.8 \pm 0.88$ ) in ethanol-induced ulcer. The ethanol extract at  $400 \text{ mg} \cdot \text{kg}^{-1}$  also restored

superoxide dismutase (SOD), reduced glutathione (GSH), catalase level in rat stomach, and large fibroblast cells in histology that support the protective effects.

KEYWORDS:

- Antioxidant
- anti-ulcer
- flavonoids
- indomethacin
- omeprazole
- rutin

ACKNOWLEDGEMENTS

The authors would like to acknowledge to City Hospital, Jabalpur (M.P.), India, for conducting the histopathological study. The authors would also like to thank to Mr. Promod Mourya for support in the animal study.

Related research 

- People also read
- Recommended articles
- Cited by  
4

## Information for

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

## Opportunities

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

## Open access

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

## Help and information

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

## Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2025 Informa UK Limited [Privacy policy](#) [Cookies](#) [Terms & conditions](#)

[Accessibility](#)

 Taylor and Francis Group

Registered in England & Wales No. 01072954  
5 Howick Place | London | SW1P 1WG