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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

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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 ± 6.38 mg·(100 gm)$^{-1}$ of ethanol extract. The ethanol extract with 400 mg·kg^{-1} produced dose-dependent inhibition on the ulcer lesion index (9.76 ± 0.06), changes in the gastric volume (4.38 ± 0.89), and pH (4.8 ± 0.88) in ethanol-induced ulcer. The ethanol extract at 400 mg·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

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