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

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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  $142.6 \pm 6.38 \text{ mg} \cdot (100 \text{ gm})^{-1}$  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

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