



Gastroprotective Effects of *Plantago major* and Metabolites in Rats

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SUMMARY. Infusions of *Plantago major* L. (Plantaginaceae) are used in Argentinean folk medicine to treat gastric diseases. In an approach to validate the traditional use of this plant, the gastroprotective activity was evaluated. Methanolic extract and infusions of *Plantago major* were evaluated for antiulcer activity against 0.6 N HCl, 0.2 N NaOH, 2.5% NaCl and absolute ethanol-induced gastric ulcers in rats. *Plantago major* offer protection against gastric lesions induced by necrotizing agents. Phytochemical analysis of the *Plantago major* extract has led to the identification of oleanolic acid, 5,7,3',4'-tetrahydroxy-6-methoxyflavone and 5,4'-dihydroxy-6,7,8',3'-tetramethoxyflavone. Compounds isolated protect against experimental ulcer induced by absolute ethanol. No signs of toxicity were observed with doses up to 2 g/kg in an acute toxicity assay. These findings indicate that methanolic extract and infusions of *Plantago major* displays potential antiulcerogenic activity and the identification of active principles could support the use of this plant for the treatment of digestive affections.

KEY WORDS: Antiulcerogenic effect, Chemical constituents, Gastroprotective activity, Plantaginaceae, *Plantago major*.

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