

Antiulcerogenic Activity of Crude Extract, Fractions and Populnoic Acid Isolated from *Austroplenckia populnea* (Celastraceae)

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Many plant crude extracts and their isolated compounds are the most attractive sources of new drugs and show promising results for the treatment of gastric ulcers. *Austroplenckia populnea* is commonly known as “marmelinho-do campo, mangabeira-brava, mangabarana and vime” and it has been used in folk medicine as anti-dysenteric and anti-rheumatic. Powdered bark wood (3.25 kg) was macerated with aqueous ethanol (96%) and the extract was concentrated under reduced pressure to yield 406 g of crude hydalcoholic extract. The hydalcoholic extract was suspended in aqueous methanol and partitioned with hexane, chloroform and ethyl acetate (EtOAc) in sequence, yielding 8.0 g, 9.5 g and 98.17 g of crude extracts, respectively. Chromatography of the hexane extract over a silica gel column led to the isolation of the triterpene populnoic acid. The oral administration of hydalcoholic, hexane, chloroform and EtOAc extracts (200 mg/kg) decreased the ulcer lesion index (ULI) by 83.15%, 46.87%, 32.2%, 68.12%, respectively. Oral administration of populnoic acid (100 mg/kg) diminished the ULI by 55.29%. All the obtained results were significant in comparison with the negative control, with exception of the chloroform extract.

Key words: *Austroplenckia populnea*, Gastric Ulcer, Populnoic Acid, Antiulcerogenic Activity