Antiulcer Activity of the Crude Extract and Aqueous Fraction from *Kalanchoe pinnata*

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**Keyword:** *Kalanchoe pinnata*; antiulcer activity.

**Introduction:** *Kalanchoe pinnata* (Crassulaceae) is a perennial medicinal herb popularly used in Brazil and other parts of the world. It is commonly known as “folha-da-fortuna”, “saião-roxo”. The aim of this study was to evaluate the antiulcer activity of the crude extract and aqueous fraction from leaves of *K. pinnata*.

**Methods:** *K. pinnata* was collected at CPQBA-UNICAMP. A voucher specimen (337) is deposited at the CPMA. The dried leaves were macerated in ethanol 70% and fractioned by liquid-liquid extraction with chloroform, ethyl acetate and water. The antiulcer activity was studied in female Wistar rats (150-180g, n=7). Two different samples (crude extract and aqueous fraction) at dosages of 100mg/kg, 200 mg/kg and 400mg/kg, were administered orally (by gavage) to the animals. Lansoprazole was used as reference compound. The ulcer was induced by an acidified ethanol solution and the results were analyzed by the software *ImageProPlus*® and *GraphPad Prism 5®*. The chemical analysis was performed through HPLC separation, with Shimadzu® LC-20® equipment, loop 20 µL, PDA (Photodiode Array) detector, flow 1 mL/min and column Shimadzu® C18 Shim-pack VP-ODS de 250 mm x 4.6 mm, particle size 5 µm. Mobile phase 25% acetonitrile (ACN) in 0.1% trifluoroacetic acid (TFA) in acid water.

**Results and Discussion/Conclusion:** The crude extract and aqueous fraction reduced gastric lesions and showed a dose-response curve. The crude extract at dosages 200 mg/kg and 400 mg/Kg exhibited gastroprotection about 74% (p<0.05) and 98% (p<0.01), respectively. The pretreatment with aqueous fraction showed inhibition of gastric ulcer about 69% and 91% at the doses of 200 mg/kg (p<0.05) and 400 mg/kg (p<0.01), respectively. Significant inhibition (p<0.001) of gastric ulcer by 77%, 95% and 96% was observed in pretreatment with ethyl acetate fraction at all the doses (100 mg/kg, 200 mg/kg e 400 mg/kg), previously reported. The HPLC assay of the aqueous fraction showed one major compound possibly a flavonoid. This compound is present in all samples and may be associated with antiulcer activity.

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