Chemical-pharmacological study of *Centaurea americana*

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Inflammation is a defense reaction of the organism against different exogenous and endogenous stimuli. Sometimes, it goes to a chronic situation that leads to chronic-degenerative diseases such as arthritis, arteriosclerosis or cancer. The pharmacological treatment of current inflammation can cause various adverse effects, such as constipation, sedation, respiratory depression and reduce the protective barrier of mucus in the stomach among others. Therefore, natural products represent resources in the search for new molecules with anti-inflammatory activity that have less adverse effects or, if possible, none. *C. americana* has been used in traditional medicine to treat liver disorders and as anti-inflammatory. The objective of this study was to examine the anti-inflammatory activity of the chloroformic and methanolic extracts of *C. americana* in the model of ear edema induced with croton oil in mice. The results obtained in this study seem to validate its use in traditional medicine as an anti-inflammatory agent, the chloroformic extract of *C. americana* showed a percentage of edema inhibition of 71.49±6.23. Meanwhile the methanolic extract showed an inhibition of 28.82±18.29% and the methanolic extract showed no significant anti-inflammatory activity compared to the group treated with indomethacin. The phytochemical study showed positive results for alkaloids and flavonoids.

**Biography**

Jimenez P E completed his Degree in Pharmacy in 2014 and is pursuing a Master's Degree in Pharmaceutical Sciences. He has participated in various congresses and seminars. His branch of studies focuses on Inflammation and Pain.

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