EuroSciCon

6th Edition of International Conference on

Pharmacognosy and Medicinal Plants

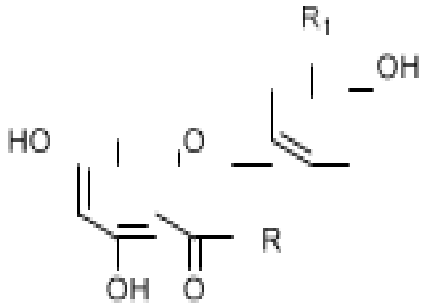
April 16-17, 2018
Amsterdam, Netherlands

Lucía Bada et al., Am J Ethnomed 2018, Volume 5
DOI: 10.21767/2348-9502-C1-006

PHYTOCHEMICAL AND PHARMACOLOGICAL STUDY OF DIANTHUS HYSSOPIFOLIUS L., A MEDICINAL PLANT FROM THE "SIERRA DEL CAUREL"

Lucía Bada, Dolores Viña and **Elías Quezada**
Universidade de Santiago de Compostela, Spain

In recent years, natural resources have regained great importance in the development and research of new pharmacological agents. "Sierra del Caurel" is a natural spot located in the heart of Galicia (Spain). It is presented as a potent reservoir of bioactive secondary metabolites. *Dianthus hyssopifolius* L. is an herbaceous plant belonging to the Caryophyllaceae family. It has been used as a medicinal plant for decades by the inhabitants of the "Sierra del Caurel" because of its antirrheumatic and anticatarrhal properties. However, to date, few phytochemical and pharmacological data have been reported on species of the genus *Dianthus*. Therefore, *Dianthus hyssopifolius* L. has been selected to study its composition and therapeutic activity. To obtain the secondary metabolites, extraction with organic solvents was first carried out. The whole plant was macerated fresh in methanol at room temperature. The crude extract was resolved in methanol:water (3:1) and extracted with hexane. The polar phase was evaporated under reduced pressure to methanol: water (1:5) after extraction with dicloromethane. After evaporation of the solvent, three oil extracts were obtained: hexane, dichloromethane and methanol. The methanol extract was solubilized in hot ethanol to yield a yellow precipitate. Sephadex LH-20 and silica gel column chromatography as well as HPLC were used in order to fractionate the precipitate and to purify the obtained compounds. Using one- and two-dimensional NMR experiments and mass spectrometry, two flavonoids have been identified: a glycoside derived from quercetin and another from kaempferol. According to the bibliography review, study of antibacterial, anticancer, antifungal, anti-inflammatory, and antioxidant properties for the different extracts are currently in progress.



Recent Publications

1. Aliyazicioglu R, Demir S, Badem M, Sener S O, Korkmaz N, et al. (2017) Antioxidant, antigenotoxic, antimicrobial activities and phytochemical analysis of *Dianthus carmelitarum*. Records of Natural Products 11:3.
2. Chandra S and Rawat D S (2015) Medicinal plants of the family Caryophyllaceae: a review of ethno-medicinal uses and pharmacological properties. Integrative Medicine Research 4(3):123–131.
3. Blanco E, Macıa M J, Morales R (1999) Medicinal and veterinary plants of El Caurel (Galicia, Northwest Spain). Journal of Ethnopharmacology 65(2):113–124

Biography

Lucía Bada is a Graduate in Pharmacy from the Universidade de Santiago de Compostela (Spain), 2015. She has a Master's Degree in Research and Development of New Drugs. Her passion lies in natural products, especially medicinal plants. She is interested in medicinal and chemical properties of phyto-preparations and phytotherapy researches in order to assess their scientific value, promote their pharmacological valorization and stimulate sustainable drug development with a high socioeconomic potential that would enhance the welfare of communities.

Lucia.bada@rai.usc.es