

Anti-inflammatory and sedative activities of *Peperomia galioides*: in vivo studies in mice

Isabel Wilches, Priscila Jiménez-Castillo, Nancy Cuzco, M. Victoria Clos, Francesc Jiménez-Altayó, Eugenia Peñaherrera, ...show all Received 09 Oct 2018, Accepted 16 May 2019, Published online: 29 May 2019

Seleccionar idioma ▼

Translator disclaimer

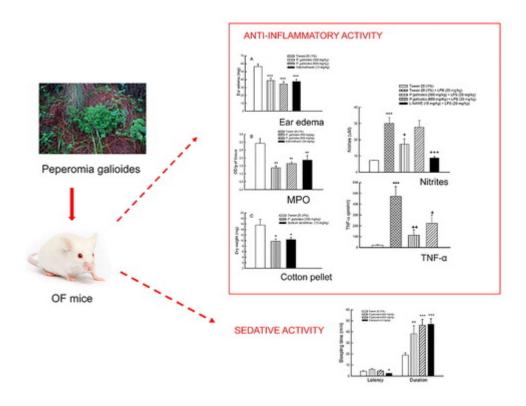
▼

Abstract

Aerial parts (leaves, flowers, stem) of *Peperomia galioides* extract administered to mice, was used to confirm its anti-inflammatory and sedative folk uses. The anti-

inflammatory activity was assessed by croton oil-induced ear oedema and myeloperoxidase (acute inflammation); cotton pellet-induced granuloma (sub-acute

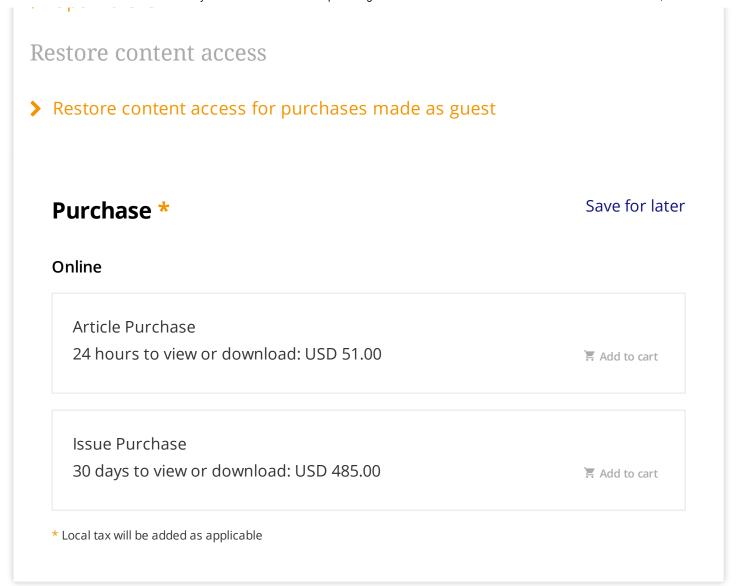
inflammation) and *Escherichia coli* Lipopolysaccharide (LPS) induced inflammation (cellular mediators). The sedative activity was studied by the pentobarbital-induced sleeping time test. Single doses (300 and 600 mg/kg; i.p.) of the extract reduced croton oil-induced ear oedema and myeloperoxidase activity. Six days administration of the extract (300 mg/kg, i.p.) to mice implanted with cotton pellets diminished granuloma formation. LPS (20 mg/kg, i.p.) enhanced plasma nitrites and TNF- α levels that were inhibited by the extract. The duration but not the onset of sleeping time was enhanced by 300 and 600 mg/kg of the extract. Our results show that *P. galioides* has anti-inflammatory and sedative activities in mice, which validates its traditional use.



Keywords: anti-inflammatory, sedative activity, Peperomia galioides, mice models

Login options

- > Log in
- Shibboleth
- OpenAthens



Additional information

Funding

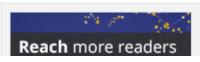
This work was funded by "Dirección de Investigación de la Universidad de Cuenca" and the VLIR-UOS project "Pharmacological Characterization of Medicinal Plants from the South of Ecuador". E. Vila was supported by Proyecto Prometeo, SENESCYT, Ecuador.

Disclosure statement

No potential conflict of interest was reported by the authors.



Sample Our Physical Science journals







Information for

Open access

Authors

Editors

Librarians

Societies

Overview

Open journals

Open Select

Cogent OA

Help and info

Help & contact

Newsroom

Commercial services

All journals

Keep up to date

Register to receive personalised research and resources by

emai

Sign me up











Copyright © 2020 Informa UK Limited Privacy policy Cookies Terms & conditions Accessibility

), Taylor & Firstnaid Crowly Zer Imenic Winso

Registered in England & Wales No. 3099067 5 Howick Place | London | SW1P 1WG