

# An HPLC-UV and HPLC-ESI-MS based method for identification of anti-inflammatory triterpenoids from the extracts of *Ugni molinae* Método clae-uv y clae-ies-ms para la identificación de triterpenoides anti-inflamatorios de los extractos de *Ugni molinae*

Goity, Leon E.

Queupil, María José

Jara, Daniela

Alegría, Sergio E.

Peña, Marcelo

Barriga, Andrés

Aguirre, María Cristina

Delporte, Carla

The aim of this study was to establish an analytical method to detect the presence of the responsible triterpenoids of the anti-inflammatory activity of the leaves of *Ugni molinae* (murtilla). Successive leaves extracts of EtOAc (EAE) and ethanol (TEE) were prepared, obtaining for the first time from TEE a triterpenoid-rich sub-fraction (TF). The topical anti-inflammatory activity of TF was assessed (43.3% at 1 mg/ear) by means of the TPA-induced mouse ear oedema model, which was compared to EAE ( $83.1 \pm 3.2\%$ ) and TEE ( $78.3 \pm 11.8\%$ ) activities, both previously evaluated by us. These extracts were characterized in their triterpenoids by HPLC-UV and HPLC-ESI-MS. We demonstrated that TF has triterpenoids responsible in part of the anti-inflammatory activity, among them, madecassic and maslinic acids. These two compounds have been reported for the first time for this species. ED50 for madecassic and alphitolic acids are also here reported. © 2013 Boletín Latinoamericano y del Caribe de Plant