



XI Simpósio Brasileiro de Farmacognosia
XVI Simposio Latinoamericano de Farmacobotanica
Curitiba, Brasil - 9-11 de agosto de 2017

Isolation of iridoids from *Escallonia bifida* and *Escallonia megapotamica*

Maria Helena Vendruscolo, Maria Luisa Diehl, Simone Gnoatto, Gilsane L. von Poser

Universidade Federal do Rio Grande do Sul, Porto Alegre/RS, Brasil

Iridoids are secondary metabolites found in a wide variety of plants, usually restricted to the eudicotyledonous Angiosperms.¹ Iridoids are monoterpenoid derivatives, occurring in the glycosylated form and divided into carbocyclic iridoids and *seco*-iridoid.^{1,2} These compounds are part of the chemical composition of many medicinal plants and present diverse activities, such as neuroprotective, cardiovascular, antibacterial, among others.¹ Due to the importance of the iridoids as a class of natural products, this study aimed the chemical prospection of these metabolites in plant species native to the flora of Rio Grande do Sul. For the experiments aerial parts of *Escallonia bifida* Link & Otto and *Escallonia megapotamica* Spreng., Escalloniaceae, were collected in the cities of Taquara and Jaquirana, respectively. The plant material was subjected to maceration exhaustively with ethanol (99.5 °GL) and was concentrated in a rotary evaporator (40-60 °C). The ethanolic extract was subjected to liquid-liquid extraction with diethyl ether (1:2 v/v), and the aqueous fractions were submitted to column chromatography on silica gel 60 (Acros Organics; 0.060-0.200 mm) affording five compounds which structures were elucidated by nuclear magnetic resonance (NMR Varian 400 MHz MR 400) of ¹H, ¹³C, correlation. The analysis of the spectra led to the identification of deacetylasperuloside, asperuloside in *E. bifida* and asperuloside, geniposide, geniposidic acid and dafiloside in *E. megapotamica*. The isolation of these compounds shows that the species *E. bifida* and *E. megapotamica* are abundant sources of iridoids asperuloside, that will be further investigated for biological activities.

Keywords: Iridoid, chemical prospection, Escalloniaceae

References:

- ¹Bianco, A., 1994. Recent developments in iridoids chemistry. Pure Appl. Chem. 66, 2335-2338.
- ²Dinda, B., Debnath, S., Harigaya, Y., 2007. Naturally occurring iridoids. A review, part 1 and 2. Chem. Pharm. Bull. 55, 159-222.