

Antimicrobial and Antioxidant Activities of *Gentianella multicaulis* Collected on the Andean Slopes of San Juan Province, Argentina

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Z. Naturforsch. **67c**, 29–38 (2012); received April 12/November 2, 2011

The infusion of the aerial parts of *Gentianella multicaulis* (Gillies ex Griseb.) Fabris (Gentianaceae), locally known as ‘nencia’, is used in San Juan Province, Argentina, as stomachic and as a bitter tonic against digestive and liver problems. The bioassay-guided isolation of *G. multicaulis* extracts and structural elucidation of the main compounds responsible for the antifungal and free radical scavenging activities were performed. The extracts had strong free radical scavenging effects in the 1,1-diphenyl-2-picrylhydrazyl (DPPH) assay (45–93% at 10 µg/mL) and ferric-reducing antioxidant power (FRAP) assay at 200 µg/mL. Demethylbellidifolin (**4**) had high antioxidant activity in the DPPH and FRAP assay. The dermatophytes *Microsporum gypseum*, *Trichophyton mentagrophytes*, and *T. rubrum* were moderately inhibited by the different extracts (MIC values of 125–250 µg/mL). Demethylbellidifolin (**4**), bellidifolin (**5**), and isobellidifolin (**6**) showed an antifungal effect (MIC values of 50 µg/mL), while swerchirin (**3**) was less active with a MIC value of 100 µg/mL. In addition, oleanolic acid (**1**) and ursolic acid (**2**) were also isolated. These findings demonstrate that *Gentianella multicaulis* collected in the mountains of the Province of San Juan, Argentina, is an important source of compounds with antifungal and antioxidant activities.

Key words: *Gentianella multicaulis*, *Trichophyton* spp., Antioxidant Activity, Antifungal Activity