



PERGAMON

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Flavonoids of *Doniophyton patagonicum* (Phil.) Hieron. (Asteraceae)

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In memory of the late Prof. Dr. Peter Seeligmann

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1. Subject and source

Doniophyton patagonicum (Phil.) Hieron. is a small shrub, 20–30 cm high, with axillar spines, abundant yellow capitula and a plumose pappus shorter than the corolla. It grows in the biogeographic Patagonic Province (Neuquén, Río Negro, Chubut, Santa Cruz) reaching Mendoza, San Juan, La Pampa and Mendoza (Urtubey, 1996).

This plant material was collected in Mendoza and a voucher specimen is deposited at the Herbarium Ruiz Leal (MERL 7464).

2. Previous work

Previous work on flavonoids in other specimen of *Doniophyton* (Bohm and Stuessy, 1995).

3. Present study

Aerial vegetative parts were successively extracted with 80% MeOH, 50% MeOH and MeOH. The concentrated extracts were run bidimensionally by PC on Whatman

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3MM, using TBA (tert-butanol–acetic acid–water 3 : 1 : 1) and AcOH 15% (acetic acid 15%) as developing solvents. Structures were assigned on the basis of chromatographic behavior, color reactions with NA (Naturstoffereagenz); standard ultraviolet spectrophotometric methods (Mabry et al., 1970) and comparison with authentic samples. *Doniophyton patagonicum* yielded a simple pattern of flavonoids: quercetin-3-*O*-glucoside, quercetin-3-*O*-rutinoside, kaempferol-3-*O*-glucoside and kaempferol-3-*O*-rutinoside.

4. Chemotaxonomical significance

The genus *Doniophyton* is represented by two andenean-patagonic species: *Doniophyton anomalum* and *D. patagonicum*. They have slight morphological differences such as the heights of plants and the lengths of involucre. Chromosomes are $2n = 50$ in *Doniophyton anomalum* and $2n = 48$ in *D. patagonicum* (Wulff, 1990). The flavonoids of *D. patagonicum* are all typical of the Barnadesioideae and identical to those identified in *D. anomalum* by Bohm and Stuessy (1995).

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