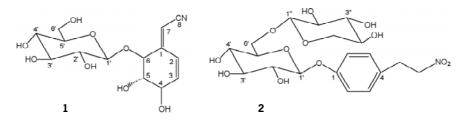
## B067 Thalictricoside, a new phenolic compound from Thalictrum orientale

<u>F.Z. Erdemgil</u><sup>a</sup>, K.H.C. Başer<sup>a</sup>, P. Akbay<sup>b</sup>, O. Sticher<sup>b</sup> and I. Çalış<sup>c</sup> <sup>a</sup> Medicinal and Aromatic Plants and Drug Research Centre (TBAM), Anadolu University, 26470 Eskişehir, Turkey.<sup>b</sup> Department of Applied BioSciences, Swiss Federal Institute of Technology (ETH) Zurich, CH-8057 Zurich, Switzerland.<sup>c</sup> Department of Pharmacognosy, Faculty of Pharmacy, Hacettepe University, TR-06100 Ankara, Turkey.

Nine species and three varieties of *Thalictrum* (meadow rue) are known to grow in Turkey. *Thalictrum* species have been used as aperient, diuretic, tonic and antiseptic in folk medicine. Their hypotensive, antimicrobial and antitumor effects have been observed in pharmacological tests. *Thalictrum* species contain alkaloids, glycosides, etc. (1,2,3). In this study, the underground parts of *T. orientale* collected from Nigde-Ulukışla in Turkey were investigated. The BuOH-soluble part of the methanolic extract was fractionated by vacuum liquid chromatography (VLC). One of the fractions yielded lithospermoside (1), a cyanoglycoside and thalictricoside (2), a new phenolic glycoside which was isolated by medium-pressure liquid chromatography (MPLC). Their structures were established by spectroscopic techniques. Lithospermoside has previously been obtained from *T. rugosum* (4). This is the second isolation of this compound. However, thalictricoside is a new natural compound.



References: 1. Schiff, P.L. et al. (1970) Lloydia 33: 403-452. 2. Başer, K.H.C. (1986) New Trends Nat. Prod. Chem. 26: 45-58. 3. Wagner et al. (1971) Phytochemistry 10: 2553-2554. 4. Wu et al. (1979) J. Nat. Prod. 42: 500-511.

## B068 Chemical composition and variability of Inula graveolens (L.) from Corsica

Marie-Cécile Blanc, Alain Muselli, Pascale Bradesi and Joseph Casanova

Université de Corse, Equipe Chimie et Biomasse, UMR CNRS 6134, Route des Sanguinaires, 20000 Ajaccio, France.

*Inula graveolens* (L.) Desf. [syn. Dittrichia graveolens (Desf.) Greuter] is a herbaceous plant of the Compositae family widespread in the Mediterranean area. The chemical composition of one essential oil from Iran has recently been reported (1).

The aim of the present work was to get a better knowledge of the essential oil of *Inula graveolens* from Corsica. First, we studied a commercial sample by combination of chromatographic (CC, GC) and spectroscopic techniques (MS,<sup>13</sup>C-NMR). The second part concerned the analysis of essential oils produced from plants collected in different regions of Corsica or at different stages of development.

The identification of the individual components of samples was based: (i) on comparison of their GC retention indices (RI) on apolar and polar columns, with those of authentic compounds, (ii) on computer matching with laboratory-made and commercial mass spectra libraries and comparison with spectra of authentic samples or literature data, (iii) on comparison of the resonance in the <sup>13</sup>C-NMR spectrum of the mixture with of those of authentic samples or literature data compiled in our spectra libraries with the help of laboratory-made software.

In total, 86 compounds were identified which represented 94% of the total amount. The main components are bornyl acetate (56.8%), borneol (7.6%) and  $\tau$ -cadinol (7.8%). The composition of *Inula graveolens* oil is stable along the vegetative life of the plant. All the laboratory-produced samples belong to the bornyl acetate/borneol chemotype, although the contents of these two compounds differ from sample to sample.

References: 1. Mirza M and Ahmadi L (2000) J Essent Oil Res, 12: 507.