## **Turkish Journal of Chemistry**

**Turkish Journal** A novel naphthoguinone glycoside from Rubia peregrina L. of Ufuk ÖZGEN<sup>1</sup>, Cavit KAZAZ<sup>2</sup>, Hasan SEÇEN<sup>2</sup>, İhsan ÇALIŞ<sup>3</sup> Maksut COSKUN<sup>4</sup>, Peter J. HOUGHTON<sup>5</sup> Chemistry <sup>1</sup>Atatürk University, Faculty of Pharmacy, Department of Pharmacognosy, 25240 Erzurum-TURKEY e-mail: uozgen@atauni.edu.tr <sup>2</sup>Atatürk University, Faculty of Sciences, Department of Chemistry, 25240 Erzurum-TURKEY **Keywords** <sup>3</sup>Hacettepe University, Faculty of Pharmacy, Department of Pharmacognosy, Authors 06100 Sihhiye, Ankara-TURKEY <sup>4</sup> Ankara University, Faculty of Pharmacy, Department of Pharmaceutical Botany, 06100 Tandoğan, Ankara-TURKEY <sup>5</sup>Pharmaceutical Sciences Division, King's College, University of London, Franklin-Wilkins Building, 150 Stamford Street, London, SE1 8WA, UK Abstract: A phytochemical study was performed on the subterranean parts (roots and rhizomes) of chem@tubitak.gov.tr Rubia peregrina. The substances were isolated from chloroform, ethyl acetate, and water soluble parts of the methanolic extract using several chromatographic techniques. 1-Hydroxy-2-methyl-9,10-Scientific Journals Home anthraguinone (1), 1,3-dihydroxy-2-methyl- 9,10-anthraguinone (2), and 1,3-dihydroxy-2-methoxymethyl-Page 9,10- anthraguinone (3) were isolated from the chloroform phase; and asperuloside (4), asperulosidic acid (5), rubiadin 3-O- $\beta$ -primeveroside (6), lucidin 3-O- $\beta$ -primeveroside (7), deacetylasperulosidic acid (8), liriodendrin (9), and a new naphthoquinone glycoside, 2-hydroxy-3-O-β-primeveroside naphthalene-1.4dione (inkumoside, 10), from the aqueous phase. The structures of the compounds were elucidated by means of spectral analysis (<sup>1</sup>H-NMR, <sup>13</sup>C-NMR, 2D-NMR--COSY, HMBC, HMQC-, EI-MS and ESI-MS).

Key Words: Rubia peregrina, Rubiaceae, anthraquinones, iridoid glycosides, naphthoquinone glycoside.

Turk. J. Chem., **33**, (2009), 561-568. Full text: <u>pdf</u> Other articles published in the same issue:<u>Turk. J. Chem.,vol.33,iss.4</u>.