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B095 Iridoid glucosides from Veronica Species

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In the flora of Turkey, the genus Veronica L. (Scrophulariaceae) is represented by 79 species, 26 of which are endemic (1). Some of these Veronica species are used as diuretic and for wound healing in traditional Turkish medicine (2). Veronica species contain mainly iridoid glucosides, some phenylethanoid and flavonoid glycosides (3-5). Our previous research has demonstrated that the water soluble portion of MeOH extracts of some Veronica species show suppressive effect on nitric oxide production in lipopolysaccharide-stimulated mouse peritoneal macrophages (6). In a continuation of this study, we present here the isolation and the structure elucidation of two highly oxygenated, new iridoid glucosides, urphoside A (1) and urphoside B (2) together with nine known iridoid glucosides, pikuroside, aucubin, catalpol, veronicoside, catalposide, verproside, amphicoside, 6-O-veratroyl catalpol, and verminoside from the active fractions of Veronica pectinata var. glandulosa, V. persica and V. hede rifolia. The planar as well as the stereo structures of the isolated compounds were determined by means of extensive 1D- and 2D-NMR spectral analysis. Molecular formula of urphoside B (2) which was the chlorinated derivative of urphoside A (1) was established by HR-ESI-MS.

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B096 Flavonoid glycosides from Veronica pectinata var. glandulosa and V. persica

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In the flora of Turkey, the genus Veronica L. (Scrophulariaceae) is represented by 79 species, 26 of which are endemic (1). Some of these Veronica species are used as diuretic and for healing of wound in Turkey (2). Previously, a large variety of flavone aglycones such as luteolin, apigenin, chrysoeriol, scutellarein, isoscutellarein and their acylated glycosides were reported from Veronica species (3). Here we report the isolation of a new (1) and three known (2-4) flavon glycosides as well as a known flavon aglycone (5) from Veronica pectinata var. glandulosa and V. persica, respectively. Their structures were determined as 3'- hydroxy, 4'-0-methylscutellarein-7-0-[2"-0- α L-rhamnopyranosyl-3"-0-(6""-0-acetyl- β D-glucopyranosyl)]- β D-glucopyranoside, named sarachoside (1), isoscutellarein-7-0-2"-0-(6""-0-acetyl- β D-allopyranosyl)- β D-glucopyranoside (2), 4'-0-methylisoscutellarein-7-0-2"-O-(6"'-O-acetyl-β-D-allopyranosyl) -β-D-glucopyranoside (3), 3'-hydroxy, 4'-O-methylisoscutellarein-7-O-2"-O-(6"'-Oacetyl-β-D-allopyranosyl)- β-D-glucopyranoside (4) and circilineol (5) by spectral analysis.

References: 1. Davis, P.H. (1978) Flora of Turkey and The East Aegean Islands. Vol. 6. University Press. Edinburgh. 2. Baytop, T. (1999) Therapy with Medicinal Plants in Turkey (Past and Present). Publications of Istanbul University. Istanbul. 3. Chari, V.M. et al. (1981) Phytochemistry 20: 1977-1979.