FLAVONOIDS FROM *Limonium meyeri*

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In continuation of research on plants of the genus *Limonium* Mill. (Boiss.) (leadwort) [1], we studied the flavonoid composition of leaves and roots of *L. meyeri* (Boiss.)(Meyer leadwort), Limoniaceae (leadwort), from the flora of Azerbaidzhan Republic [2].

Leaves and roots were collected during full flowering (October 2004) near Kyurdamir, Azerbaidzhan Republic.

Air-dried roots (0.5 kg) were exhaustively extracted with ethanol. The extract was evaporated to a thick consistency and diluted with water (200 mL). Flavonoids were extracted with ethylacetate. Two-dimensional chromatography of the ethylacetate extract detected at least five compounds of flavonoid nature.

A part of the ethylacetate extract was evaporated and hydrolyzed with H_2SO_4 (4%) for 4 h. The detected aglycon was myricetin; the carbohydrates, L-rhamnose and D-glucose.

Myricetin, $C_{15}H_{10}O_8$, mp 340-342°C (ethanol). UV spectrum (λ_{max}, nm, MeOH): 255, 380. Authentic samples were also used to identify myricetin [3].

The other part of the ethylacetate extract was evaporated to dryness and recrystallized from ethanol to afford a pale yellow crystalline compound, $C_{21}H_{20}O_{12}$, mp 204-206°C, $[\alpha]_D$ -110° (*c* 0.5, MeOH), R_f 0.45 (acetic acid, 15%, Filtrak No. 16 paper), 0.74 (acetic acid, 60%), λ_{max} (nm, MeOH) 257, 305, 355. Acid hydrolysis produced myricetin and L-rhamnose. Yield of aglycon, ~64%.

Based on the physicochemical properties and the products of acid hydrolysis, this compound was identified as myricetin-3-O-rhamnoside [1].

The presence in leaves of at least three flavonoid glycosides was established in a similar manner. The aglycon was also myricetin; the carbohydrates, L-rhamnose and D-glucose. The dark fluorescence in filtered UV light of the flavonoids is consistent with substituents in the 3-position.

Thus, roots of Meyer leadwort contain at least five compounds of flavonoid nature; leaves, at least three. Both parts of the plant have flavonoids derived from myricetin and the carbohydrates L-rhamnose and D-glucose.

Meyer leadwort from the flora of Azerbaidzhan was studied for the first time [4].

It should be noted that myricetin typically has high cholegogic activity and is the basic component of the medicinal preparation flakumin [5, 6].

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