The alkali-soluble polysaccharides of the HCs A and B (yields 7.7 and 7.2%, respectively) were present in considerably larger amounts than in the WSPSs and PCSs. In the HCs A we found Rha, Ara, Xyl, Man, Glc, and Gal in a ratio of 17:2.5:1:41.1:3.4:1, and in the HC B the same sugars in a ratio of 6.7:4.2:1:30.7:9.7:7.5. The HCs A and B differed in their contents of the individual monosaccharides.

The predominating component in the polysaccharide fractions was mannose. The latter is rarely found in the free state in nature. Direct hydrolysis of the seeds by the method of Stepanenko and Baksova [5] (2 N H_2SO_4, 100°C, 5 h) gave D-mannose with a yield of 1.5% (on the air-dry seeds).

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COMPONENTS OF *Haplophyllum dauricum*

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Continuing a study of the epigeal part and roots of *Haplophyllum dauricum* (L.) G. Don [1], we have isolated another five individual substances, four of which have been identified on the basis of spectral characteristics and by direct comparison with samples isolated by us from other species of *Haplophyllum*.

Compounds (I), mp 285-286°C (acetate with mp 231-233°C) and (II), mp 202-204°C, were shown to be identical with the lignan diphyllin [2] and the coumarin scopoletin, respectively.

Substances (III), mp 212-214°C, and (IV), mp 225-228°C, proved to be identical with the flavonol glycosides haplosides B and D [3, 4].

Compound (V) (dauroside C), with the composition $C_{24}H_{30}O_{14}$, mp 93-95°C, according to its UV spectrum, ($\lambda_{max}^{ethanol}$ 229, 251 infl., 259 infl., 288, 343 nm; log ε 4.11, 3.65, 3.57, 3.67, 3.74), was assigned to the 6,7-di-O-substituted coumarins. IR spectrum, ν_{max}^{KBr}, cm^{-1}: 3520-3290 (OH groups); 1717-1702 (C=O of α-pyrone and ester groups); 1616, 1565 (aromatic C=C bonds); 1105-1026 (C–O vibrations). The PMR spectrum of dauroside C (Py-d_5) showed the signals of the H-3 and H-4 protons (6.09 and 7.49 ppm, d, 1 H each, J = 9.5 Hz), H-5 (7.47 ppm, 1 H, s), and H-8 (6.82 ppm, 1 H, s) and of CH_3O– (3.51 ppm, 3 H, s), CH_3COO– (1.81 ppm, 3 H, s), and CH_3– (1.43 ppm, 3 H, d, 5 Hz) groups.

In the 3.70-4.63 ppm region were observed the signals of ten protons of the sugar moiety, the signals of the anomeric protons of which were found at 5.24 ppm (1 H, br.s) and 5.44 ppm. Apparently, the signal of gem-acyl proton is superposed on the signal of one of the anomeric protons as a result of which the signal at 5.44 ppm appears in the form of a two-proton multiplet.

The IR and PMR spectra permitted the assumption that dauroside C was an acylated coumarin glycoside. The hydrolysis of compound (V) with 5% sulfuric acid led to scopoletin, D-glucose, and L-rhamnose. The acetylation of (V) with acetic anhydride in pyridine gave a hexaacetate $C_{34}H_{40}O_{19}$ (VI), M^+ 752. Consequently, the coumarin glycoside (V) is a bioside. In the mass spectrum of (VI), together with others, there were strong peaks of ions with m/z 273 (100%), 213 (8), 153 (38), and 111 (22), showing that in (V) the rhamnose is the terminal sugar residue [1].

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In the PMR spectrum of (VI), the signal of the anomeric proton of the rhamnose residue is observed at 4.64 ppm and the ratio of the intensities of the protons of the sugar moiety at 3.4-4.4 and 4.5-5.6 ppm corresponds to 4:8. These facts are characteristic for acetates of rutinosides [5]. The value of the ^{13}C chemical shift of the C_6' atom (δ 66.2 ppm) also confirms the 1 → 6 arrangement of the bond of the rhamnose residue with the glucose residue [1].

Thus, compound (V) is a natural monoacetyl derivative of scopoletin 7-O-rutinoside.

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PHENOLIC COMPOUNDS OF THE EPIGEAL PART OF *Vicia truncatula*

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We have studied the composition of the phenolic compounds of the epigeal part of *Vicia truncatula* Fisch., family Leguminosae collected in the flowering period in the Pyatigorsk region (Mount Mashuk).

The comminuted air-dry raw material was exhaustively extracted with 50% ethanol with heating. The ethanolic extract was evaporated to 1/3 volume and the residue was treated repeatedly with chloroform. Qualitative reactions showed the presence of phenolic compounds in the chloroform fraction and in the aqueous residue.

The chloroform fraction was concentrated and transferred to a column of L 40/100 silica gel. Elution was performed with toluene, and then with a mixture of toluene and ethyl acetate (9:1). Three compounds possessing a blue fluorescence in UV light were isolated. The substances were additionally purified by TLC on L 5/40 silica gel in the ethyl acetate–heptane (4:1) system.

Substance (I) consisted of yellowish crystals with mp 204-206°C, composition $C_{10}H_8O_4$. UV spectrum: $\lambda_{max}^{CH_3OH}$ (nm), 230, 254, 298, 346. IR spectrum: ν_{max}^{KBr} (cm^{-1}), 3045, 1720 (C=O of an α-pyrone), 1614, 1571, 1520 (C=C). In a chromatographic comparison of the substance with an authentic sample of scopoletin, no differences were observed.

On further elution of the chloroform extract from the column of silica gel with a mixture of toluene and ethyl acetate in a ratio of 9:2, substance (II) was obtained, this consisting, after recrystallization from a mixture of heptane, chloroform, and methanol, of pale yellow crystals with the composition $C_{16}H_{12}O_6$, M^+ 300, mp 260-263°C. Its IR spectrum (in paraffin oil) showed a broad band at 3500-3300 cm^{-1} (–OH group), 2985 cm^{-1} (–OCH_3), 1650 cm^{-1} (C=O of a γ-pyrone), 1605, 1510, 1450 cm^{-1} (aromatic nucleus). UV spectrum, λ, nm: CH_3OH 252, 292 sh, 344, CH_3COONa 269, 345, $CH_3COONa + H_3BO_3$ 253, 269, 345, $AlCl_3 + HCl$ 259, 271, 352, $AlCl_3$ 261, 275, 358, C_2H_5ONa, 270, 327 sh., 382.

In the PMR spectrum of substance (II) (in deuteropyridine, δ scale, ppm) there were the following signals: 3.78 (singlet, 3 H, –OCH_3), 6.75 (quartet, 2 H), 6.96 (singlet, 1 H), doublets at 7.05 (1 H), 7.52 (1 H), and 7.89 (1 H) – the signals of the aromatic protons H-6, H-8, H-3, H-5, H-2', and H-6', respectively. The location of the methoxy group at position 4' was shown by independent synthesis of the substance from hesperidin by a known procedure [2]. In this way, we identified substance (II) as 3',5,7-trihydroxy-4'-methoxyflavone (diosmetin).

This is the first time that a coumarin has been detected in a plant of the genus *Vicia*.

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