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Continuing a study of the chemical composition of the epigeal part of *Astragalus onobrychis* L. [1], fam. *Fabacea* we have investigated the phenolic carboxylic acids and coumarins. Their isolation was achieved by the following procedure: 1 kg of air-dry raw material gathered in the vegetation period in the environs of Pyatigorsk was extracted with 80% ethanol, the extract was evaporated to an aqueous residue, and the chlorophyll and other lipophilic substances that had precipitated were filtered off, the washed residue was discarded, and the filtrate was treated successively with chloroform and ethyl acetate. Column chromatography of the chloroform and ethyl acetate. Column chromatography of the chloroform extract on a polyamide sorbent, using as eluents benzene, chloroform, and mixtures of them [2], permitted the isolation of substances of coumarin nature: scopoletin $C_{10}H_8O_4$, mp 202-204°C; umbelliferone $C_9H_6O_3$, mp 231-233°C; and a compound $C_{16}H_{18}O_9$, mp 218-219°C [3] which, on hydrolysis with 10% H_2SO_4 for four hours, gave a hydrolysate in which scopoletin and D-glucose were detected. It proved to be scopoletin 7-glucoside - scopolin [4].

From the ethyl acetate extract, by chromatography on a column of polyamide sorbent, using as eluents water and mixture of water and alcohol with increasing concentrations of the latter up to 10%, we isolated the following phenolic carboxylic acids; p-hydroxybenzoic, $C_7H_6O_3$, mp 210-212°C; 4-hydroxycinnamic (p-coumaric) $C_9H_8O_3$, mp 212-214°C; 3,4-dihydroxycinnamic (caffeic) $C_9H_8O_4$, mp 194-196°C; 4-hydroxy-3-methoxycinnamic (ferulic) $C_{10}H_{10}O_4$, mp 169-171°C; 5-O-caffeoyl-D-quinic (chlorogenic) $C_{16}H_{18}O_9$, mp 203-205°C; and isoferulic $C_{10}H_{10}O_4$ [5, 6]. The substances were identified by their physicochemical properties, mixed melting points with authentic samples, and their UV and IR spectra.

This is the first time that any of these substances have been isolated from *Astragalus onobrychis*.

LITERATURE CITED

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