FLAVONOIDS OF Galium fagetorum. II

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Continuing a study of the phenolic compounds of Galium fagetorum, we have isolated flavonoids F_2, F_3, and F_4 by chromatography on Kapron columns using isopropanol as the eluting medium [1]. Compounds F_2 [$C_{22}H_{22}O_{11}$, mp 265-269°C (from 70% ethanol), $[\alpha]_D^{22}$ −37° (c 0.1; dimethylformamide), UV spectrum, λ_{max} (in ethanol) 335, 257 nm] and F_3 [$C_{21}H_{20}O_{10}$, mp 225-227°C (isopropanol), $[\alpha]_D^{22}$ −53° (c 0.1; dimethylformamide), UV spectrum λ_{max} (in ethanol) 343, 272 nm] were identified on the basis of a study of hydrolysis products and their derivatives and of IR spectra and UV spectra in the presence of complex-forming and ionizing reagents as diosmetin 7-O-β-D-glucopyranoside and apigenin 7-O-β-D-glucopyranoside, respectively. Flavonoid F_4 [$C_{27}H_{30}O_{15}$, mp 176-177°C (from 70% ethanol), $[\alpha]_D^{18}$ −57° (c 0.1, dimethylformamide)] in an analogous study was found to be completely identical in its properties with palustroside, which was isolated previously by one of the authors [2]. In addition, we found a diosmetin primeveroside, the definitive structure of which has not been determined.

LITERATURE CITED

1. A. K. Bogaevskii and M. I. Borisov, KhPS [Chemistry of Natural Compounds], 367 (1970).
2. M. I. Borisov and N. F. Komissarenko, KhPS [Chemistry of Natural Compounds], 371 (1969).

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