the form of the trimethylsilyl derivatives by mass spectrometry (see [2]). The predominating bases in the lipids under consideration were identified as Δ^4-sphingenines and sphinganines; their total amount in the corresponding fractions of the methylanolates exceeded 95%, and their ratio was between 5:1 and 6:1. As minor components the 16:0, 16:1, 18:2, 20:0, and 20:1 sphingosine bases were present. The fatty acid methyl esters were analyzed by GLC-mass spectrometry (the esters of the hydroxy acids in the form of their trimethylsilyl derivatives). In the methanolysate of the u-GCs, esters of the following acids were detected: 16:0 (1.9%), 18:0 (14.5), 20:0 (1.7), 20:1 (1.6), 22:0 (4.4), 22:1 (6.2), 24:0 (17.0), 24:1 (35.0), 26:0 (3.5), 26:1 (8.7), 28:0 (5.5). In the analogous fraction of the methanolysate of the h-GCs esters of the following 2-hydroxy acids were found: 18:0 (22.7%), 20:0 (28.2), 22:0 (6.4), 24:0 (27.3), 25:0 (5.2), 26:0 (3.7), 26:1 (1.4), 28:0 (2.9), 28:1 (2.2). The same unsubstituted and 2-hydroxy acids were found in the products of the degradation of the GCSs but their quantitative composition differed by a lower amount (~0.5%) of the C_{28} acids and a rise to the 5-6% level of the 18:0 and 24:1 acids. A feature of the glycolipids studied may be considered to be the presence in them of a considerable amount of acids with relatively short chains (C_{18}, C_{20}) and also an appreciable amount of the C_{28} acids.

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FLAVONOIDS OF THE FLOWERS OF *Crataegus sanguinea*

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We have investigated the flavonoid composition of the flowers of *Crataegus sanguinea* Pall. (redhaw hawthorn). Flavonoids were extracted from the raw material with 96% ethanol twice for 48 h each time. The combined extract was evaporated to dryness and the residue was treated with hot distilled water, and after cooling the solution was filtered and purified by treatment with chloroform. The sum of the phenolic compounds was extracted with ethyl acetate. After the solvent had been distilled off, a yellowish-brown powder was obtained. It was dissolved in ethanol, and, on standing, a yellow precipitate deposited from the solution which, after recrystallization from ethanol, was identified by UV and PMR spectroscopy, melting point, R_f values with markers, and the products of its hydrolysis, as hyperoside [1].

Another six compounds of flavonoid nature (two aglycones and four glycosides) were isolated by column chromatography on cellulose and silica gel, and five of them were identified, as follows:

Substance 1 — $C_{15}H_{10}O_7$, mp 309-312°C, $\lambda_{max}^{CH_3OH}$ (nm) 255, 269 sh, 370; quercetin [2];

Substance 2 — $C_{16}H_{12}O_7$, mp 271-274°C, $\lambda_{max}^{CH_3OH}$ (nm) 273, 328, 373; 8-methoxykaempferol [1];

Substance 3 — $C_{21}H_{20}O_{10}$, mp 255-257°C, $\lambda_{max}^{CH_3OH}$ (nm) 270, 303 sh, 335, $[\alpha]_D^{20}$ −14° (c 0.1; pyridine); vitexin [1];

Substance 4 — $C_{27}H_{30}O_{16}$, mp 193-197°C, $\lambda_{max}^{CH_3OH}$ (nm) 257, 268 sh, 300 sh, 362, R_f 0.53 (BAW, 5:1:4); bioquercetin [3]; and

Substance 5 — $C_{22}H_{22}O_{12}$, mp 239-243°C, $\lambda_{max}^{CH_3OH}$ (nm) 271, 328, 355, $[\alpha]_D^{20}$ −6.6° (c 0.1; ethanol), R_f 0.76 (BAW, 5:1:4); pinnatifidin [4].

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In the identification of the substances we used UV spectroscopy with ionizing and complex-forming additives, PMR spectroscopy, and acid hydrolysis [5, 6].

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ACETYLVITEXIN — A NEW FLAVONOID FROM THE FLOWERS OF *Crataegus sanguinea*

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By column chromatography on cellulose and silica gel, from the total flavonoids of the flowers of *Crataegus sanguinea* Pall. (redhaw hawthorn) we have isolated a substance of flavonoid nature in the form of white acicular crystals with the composition $C_{23}H_{22}O_{11}$, mp 208-211°C (from methanol), R_f 0.58 (15% CH_3COOH), 0.67 (BAW, 5:1:4).

Alkaline hydrolysis with a 0.1% solution of KOH gave a substance which was identified as vitexin.

UV spectra with ionizing and complex-forming additives (λ_{max}, nm): (CH_3OH) 269, 222; (+ CH_3COONa) 281 sh, 301, 378; (+ CH_3COONa/H_3BO_3) 270, 283, 338; (+ CH_3ONa) 281, 330, 394; (+ $AlCl_3$), 277, 305, 350, 386 (+ $AlCl_3/HCl$) 278, 304, 344, 382. Analysis of the UV-spectroscopic results showed the presence of free hydroxy groups in the 4',5, and 7 positions [1, 2].

The PMR spectrum of the glycoside taken in deuteropyridine contained the following signals (ppm): doublet at 8.23 (2H), J = 8.5 Hz, being the signal of the H-2',6' protons; doublet at 7.03 (2H), J = 8.5 Hz — H-3',5'; singlet at 6.8 (1H) — H-6; singlet at 6.7 (1H) — H-3; triplet at 6.35 (1H), J = 8.5 Hz — assigned to the signal of the proton in position 2 of a glucose residue; singlet at 5.77 (1H) — assigned to the signal of the proton of the anomeric center of a β-glucose residue; multiplet at 4.05-4.6 ppm (6H, belonging to the protons of the glucose residue; singlet at 1.76 (3H) — the signal of an acetyl group. The position of the acetyl group was determined by the INDOR method.

On the basis of the results of hydrolysis and of UV and PMR spectroscopy, the substance isolated has been characterized as 8-C-(2"-acetyl-β-D-glucopyranosyl)-4',5,7-trihydroxyflavone, and we have called it acetylvitexin.

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