## FLAVONOIDS OF Calluna vulgaris

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In an investigation of the epigeal part of *Calluna vulgaris* (L.) Hill. (scotch heather) collected in the Vitebsk oblast, we have found ten substances of flavonoid nature by two-dimensional chromatography on paper.

The raw material (1 kg) was exhaustively extracted with ethanol on the boiling-water bath. The combined extracts were concentrated under vacuum to small volume, the residue was treated with chloroform, and the flavonoid compounds were extracted with diethyl ether and with ethyl acetate. Chromatography of the ether fraction on a column of polyamide sorbent gave an individual substance of flavonoid nature with the composition  $C_{15}H_{10}O_{7}$ , mp 309-312°C (mp of the acetate 198-199°C) which, according to its UV and IR spectra and the products of alkaline degradation, was identical with quercetin.

On chromatography of the ethyl acetate fraction, three substances (A, B, and C) were isolated; on the basis of qualitative reactions they were assigned to the flavonoids.

Substance A had the composition  $C_{21}H_{20}O_{12}$ , mp 235-239°C,  $[\alpha]_D$  -43° (c 0.32; dimethylformamide),  $\lambda_{max}$  257, 273, 363 nm.

From the products of its hydrolysis (quercetin and galactose) and the characteristics of its UV, IR, and NMR spectra, compound A was identified as hyperoside. The study of substances B and C is continuing.

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