FLAVONOIDS OF Chamaedaphne calyculata

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UDC 547.972

In the leaves of <u>Chamaedaphne calyculata</u> (leatherleaf), family Ericaceae collected in the Vitebsk oblast, by two-dimensional chromatography on paper and by qualitative reactions we have found eight substances of flavonoid nature.

The dried and comminuted leaves were extracted in a Soxhlet apparatus. The ethanolic extracts were evaporated under vacuum and the residue was diluted with water and treated with chloroform. The flavonoid compounds were isolated from the purified extract with ethyl acetate and were separated on polyamide sorbent. Two individual flavonoid compounds were obtained.

The first substance, with the composition $C_{15}H_{10}O_7$, formed yellow acicular crystals with mp 309-312°C (ethanol), mp of the acetate 198-199°C, λ_{max} 257, 374 nm. The presence of free hydroxy groups in the 3', 3, 4', 5, and 7 positions in the compound was shown by UV spectroscopy. This is in harmony with the fact that phloroglucinol and protocatechuic acid were found in the products of alkaline degradation. These facts, and also a mixed melting point, permitted the substance to be identified as quercetin [1].

The second substance, with the composition $C_{21}H_{20}O_{12}$, mp 230-239°C, gave an acetyl derivative with mp 107-109°C, λ_{max} 258, 360 nm. In the products of acid hydrolysis, quercetin and galactose were found by paper chromatography. The attachment of the galactose at C_3 was shown by UV spectroscopy. The constants and the IR and NMR spectra of the substance coincided with those for quercetin 3-O- β -D-galactopy-ranoside (hyperoside) [2, 3], and this identification was confirmed by a mixed melting point.

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Vitebsk Medical Institute. Translated from Khimiya Prirodnykh Soedinenii, No. 5, p. 669, September-October, 1973. Original article submitted March 12, 1973.

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