

added, two absorption bands appeared in the UV spectrum of substance (I) in contrast to the UV spectrum of substance (II). This fact shows that the sugar component is attached at position 3 of quercetin.

Main Physicochemical Properties of Substances (I) and (II)

Sub-stance	Elemen-tary com-position	Mp, °C	[α] _D ²⁰ (in metha-nol), deg	UV spectra				
				λ_{\max} (initial)	ditto + so-dium ace-tate	ditto + so-dium meth-oxide	ditto + bo-ric acid + sodium acetate	ditto + alu-minum chloride
(I)	C ₂₁ H ₂₀ O ₁₂	220—225	- 16	355 300* 267**	380	408 325*	375 295**	435 335* 300**
(II)	C ₁₅ H ₁₀ O ₇	311—314	0	256 370 300* 272** 254	273 385 322 274	271 332 285** 245	260 385 305* 257	271 457 385* 300** 271

*Weak absorption band

**Shoulder

A comparison of the molecular rotations of substance (I) and phenyl β -D-glucopyranoside showed that substance (I) is glycosidated β -D-glucopyranose and is 5, 7, 3', 4'-tetrahydroxyflavone 3-(β -D-glucopyranoside) (isoquercitrin).

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THE PHENOLIC COMPOUNDS OF HEDYSARUM KOMAROVII

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From 176.0 g of the herb Hedysarum Komarovii B. Fedtsch collected on Shikotan Island, we obtained an ethanolic extract the evaporation of which gave a crystalline substance A (yield 1.3%). After recrystallization from ethanol, substance A was identified as a substance of a xanthone nature—mangiferin (hedysaride), which is the 2-C glucoside of 1, 3, 6, 7-tetrahydroxyxanthone [1]. From the ethanolic extract after the separation of substance A, by chromatography on a column of polyamide sorbent, we isolated two flavonoid glycosides—substances B and C.

Substance B was identified as hyperoside on the basis of the products of acid and enzymatic hydrolysis, IR and UV spectra with the addition of ionizing and complex-forming agents, and by a direct comparison with an authentic sample.

Substance C was identified as polystachoside (quercetin 3- β -L-arabofuranoside) on the basis of the hydrolysis products, the results of UV and IR spectroscopy, and a comparison of the molecular rotation of glycoside C and the corresponding phenyl glycosides [2].

REFERENCES

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