

We have previously reported the isolation from an ethyl acetate fraction of the epigeal part of *Iris ensata* Thunb. (Russianiris) of two C-glycosides of apigenin [1, 2]. Continuing a study of this fraction by column and paper preparative chromatography we have isolated substances (III) and (IV). Both compounds were assigned, on the basis of qualitative reactions, to the flavone glycosides [3].

Substance (III) consisted of a light yellow crystalline powder with mp 265–267°C (20% ethanol), R_f 0.14 (15% acetic acid – system 1), 0.42 (1-butanol–acetic acid–water (4:1:5) – system 2).

UV spectrum: $\lambda_{\max}^{\text{C}_2\text{H}_5\text{OH}}$ 257, 167, 351 nm. The UV spectra with ionizing and complex-forming reagents showed the presence of free hydroxy groups in the 3',4',5, and 7 positions. Prolonged heating with acids did not lead to the formation of the aglycone, but a new substance was detected with R_f 0.35 (system 1) and 0.57 (system 2), which gave an equilibrium system with the initial substance. The formation of such an equilibrium is characteristic for C-glycosides [5]. Acid hydrolysis by Kiliani's method [4] permitted the detection of the aglycone luteolin and the sugar D-glucose. In the IR spectrum of substance (III) there were absorption bands at (cm⁻¹): 3620–3350 (phenolic hydroxyl), 1680 (C=O of a γ -pyrone ring), 1620, 1520 (conjugated double bonds), 1045, 1020 (pyranose form of a sugar) [5].

On the basis of the results obtained, and also of a comparison with an authentic sample of orientin, substance (III) can be characterized as luteolin 8-C- β -D-glucopyranoside (orientin).

Substance (IV) had mp 235–237°C (20% ethanol), R_f 0.31 (system 1) and 0.44 (system 2), and its UV and IR spectrum were characteristic for flavonoids and identical with those of substance (III). On being heated with 10% sulfuric acid, substance (IV) underwent isomerization with the formation of orientin. Hydrolysis by Kiliani's method again gave the aglycone luteolin and D-glucose. Substance (IV) isolated from the epigeal part of the Russian iris was identified from its physicochemical properties, melting point, mixed melting point, and UV and IR spectra as luteolin 6-C- β -D-glucopyranoside (homoorientin).

LITERATURE CITED

1. K. F. Blinova, N. I. Pryakhina, and V. I. Glyzin, *Khim. Prir. Soedin.*, 116 (1977).
2. N. I. Pryakhina, Abstracts at an All-Union Conference on the Search for Medicinal Substances of Natural Origin [in Russian], Leningrad (1981), p. 22.
3. V. A. Bandyukova, *Rast. Resur.*, No. 1, 591 (1965).
4. H. Kiliani, *Chem. Ber.*, 63, No. 8, 2866 (1930).
5. N. P. Maksyutina and V. I. Litvinenko, in: *Phenolic Compounds and Their Biological Functions* [in Russian], Moscow (1978), p. 7.
6. G. A. Drozd, K. E. Koreshchuk, and V. I. Litvinenko, *Farm. Zh.*, No. 1, 56 (1969).