

CYNAROSIDE AND LUTEOLIN FROM *Campanula persicifolia*
AND *C. rotundifolia*

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From each of the herbs *Campanula persicifolia* L. (peachleaf bellflower) and *C. rotundifolia* L. (bluebell), family Campanulaceae Juss., collected in the flowering period in the Perm oblast we have isolated two substances of flavonoid nature by chromatography on polyamide.

The first substance consists of light yellow acicular crystals with mp 258–259°C (from 70% ethanol), $[\alpha]_D^{20} -98^\circ$ [c 1.02; methanol–pyridine (1:1)]. Bryant's test [1] showed that it is a glycoside. Hydrolysis of the glycoside with 10% sulfuric acid gave an aglycone in the form of greenish yellow acicular crystals with mp 329–330°C from 50% ethanol [the acetate of the aglycone has mp 226–227°C (from 80% ethanol)]. On the basis of bathochromy in the UV region and also on the basis of the UV spectra, the glycoside isolated and its aglycone have been identified as cynaroside (luteolin 7-O- β -D-glycoside) and luteolin (3',4',-5,7-tetrahydroxyflavone), respectively.

The second substance was identified by chemical and physical methods as luteolin.

One of us has previously isolated cynaroside and luteolin from the herb *C. patula* L. (rambling bellflower) [2].

LITERATURE CITED

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2. L. S. Teslov, Proceedings of a Scientific and Practical Conference on the Problem of Principles of the Development of Pharmacy and the Search for New Methods of Preparing Drugs and Methods for their Investigation [in Russian], Tyumen' (1970), p. 116.

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