

LUTEOLIN 7-GLUCOSIDE FROM *Eremostachys speciosa*

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From the epigeal part of *Eremostachys speciosa* Rupr., family Labiatae, collected in 1971 in the flowering period in the environs of Frunze we have isolated the flavonoid cynaroside, $C_{21}H_{20}O_{11}$, mp 254–256°C (from aqueous methanol), $[\alpha]_D^{20} - 80^\circ$ (c 0.1; methanol), R_f 0.17 (15% acetic acid, system 1) and 0.38 [butan-1-ol–acetic acid–water (4:1:5), system 2], mol. wt. (Rast) 450. The substance is pale-yellow, readily soluble in ethanol and methanol, and sparingly soluble in chloroform and ether.

Its acid hydrolysis with 10% sulfuric acid gave the aglycone luteolin with mp 328–330°C (from aqueous methanol) and glucose, identified by chromatography in system 2 with the subsequent treatment of the chromatogram by the aniline phthalate reagent.

The results of a polarimetric investigation (molecular rotation 223°) and the splitting off of D-glucose on enzymatic analysis showed the β configuration of the link of the carbohydrate component with the aglycone.

It was shown by bathochromy with diagnostic reagents that the D-glucose is attached at position 7 [1]. Thus, we have characterized the flavonoid glycoside isolated as luteolin 7-O- β -D-glucopyranoside, or cynaroside.

LITERATURE CITED

1. V. I. Litvinenko and N. P. Maksyutina, *Khim. Prirodn. Soedin.*, 420 (1965).

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