The IR and UV spectra and an analysis of the conversion products, together with the absence of a depression of the melting point with an authentic sample, enabled glycoside I to be identified as kaempferol 3-O-α-L-rhamnofuranoside-7-O-α-L-rhamnofuranoside, which has been reported previously under the names "kaempferitrin" and "lespedin" [2, 3].

28 March 1969

Pyatigorsk Pharmaceutical Institute

UDC 547.972

LUTEOLIN FROM THE LEAVES OF DIGITALIS CILIATA

E. P. Kemertelidze

Khimiya Prirodnykh Soedinenii, Vol. 5, No. 5, p. 440, 1969

In the preparation of cardiac glycosides from the leaves of Digitalis ciliata Trautv. we isolated a yellow crystalline substance [1] giving all the reactions for flavonoids. In the cyanidin test, an octanol-extractable orange-red pigment was formed, which shows the aglycone nature of the compound [2]. When the substance was subjected to paper chromatography in the butanol–acetic acid–water (4 : 1 : 5) system it gave a single spot, while in each of the systems ethyl acetate–formic acid–water (10 : 2 : 3) and benzene–ethyl acetate–acetic acid (74.5 : 23.5 : 2) systems it gave two spots. On them the main component appeared at the level of an authentic sample of luteolin, and a small spot in the region of apigenin.

To separate the combined flavonoids into the individual compounds we chromatographed them on a polyamide sorbent. Pure luteolin was isolated by washing the column with a mixture of chloroform and ethanol (1 : 1). After its recrystallization from dilute ethanol, long yellow acicular crystals, $C_{15}H_{10}O_6$, with mp 330–332° C were obtained. It gave no depression with standard luteolin. The acetate of the substance melted at 226–231° C. The IR and UV spectra of the flavonoid and its acetate coincided completely with literature data for luteolin and its acetate [3, 4].

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23 April 1969

Kutateladze Institute of Pharmacochemistry AS Georgian SSR

UDC 547.972

LUTEOLIN 7-GLUCOSIDE FROM CAMPANULA LACTIFLORA

S. F. Dzhumyrko, E. T. Oganesyan, and A. L. Shinkarenko

Khimiya Prirodnykh Soedinenii, Vol. 5, No. 5, pp. 440–441, 1969

The chromatography of an ethanolic-aqueous extract from the leaves of Campanula lactiflora M. B. in the BAW (4 : 1 : 5) system showed the presence of three substances of a flavonoid nature. One of them, with the composition $C_{20}H_{20}O_{11}$, mp 256–258° C (from ethanol), $[\alpha]_D^{20}$ −58° (c 0.528; methanol–pyridine (3 : 2)), mol. wt. 259, is a flavone glycoside as was shown by the results of color reactions.

UV spectrum: λ_{max} 352, 255 mμ; $\lambda_{max}^{AlCl_3}$ 400, 275 mμ; $\lambda_{max}^{CH_3COONa}$ 355, 258; $\lambda_{max}^{CH_3COONa+H_3BO_3}$ 380, 258 mμ; $\lambda_{max}^{CH_3ONa}$ 407, 265 mμ; $\lambda_{max}^{AlCl_3+HCl}$ 390, 275 mμ. The elementary composition found corresponds to that calculated.