HYDROXYCOUMARINS OF Passiflora incarnata

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In the roots of <u>Passiflora incarnata</u> L. (maypop passionflower) by preliminary chromatographic analysis we have found four compounds giving with alkalis a deep blue or pale blue coloration and with diazotized sulfanilic acid a pink coloration.

The crude roots collected in Tbilisi in 1971 in the period of the flowering of the plants (2 kg) were exhaustively extracted with 7 liters of hot methanol; after concentration the extract was treated with 15 liters of chloroform—methanol (5:1), the solvent was evaporated, and the residue was transferred to a column of polyamide (d 5 cm, h 40 cm).

Elution with water gave substance (I) which predominated in the roots of P. incarnata.

When the column was washed with chloroform-methanol (5:1) with reseparation on Sephadex LH-20, substance (II) was obtained.

Substance (I) consisted of colorless acicular crystals with mp 235-236°C; UV spectrum: $\lambda \frac{C_2H_5OH}{max}$ 320, 255 nm; IR spectrum: 1720 cm⁻¹ (γ -pyrone), 3300 cm⁻¹ (OH group). On the basis of the results obtained, substance (I) was identified as umbelliferone [1].

Substance (II) with mp 207-208°C consisted of white crystals possessing the properties of hydroxy-coumarins. On the basis of its UV and IR spectra and a mixed melting point, it was identified as scopoletin.

LITERATURE CITED

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