

FLAVONOIDS OF *Mentha piperita*,
VARIETY KRASNODARSKAYA 2

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The isolation of six flavones from the chloroform fraction of an ethanolic extract of wastes of the Krasnodarska 2 variety of mint has been reported previously [1].

In the present communication we give the results of the isolation and chemical study of the flavonoids of an ethyl acetate fraction.

Three substances (VII-IX) were isolated by column chromatography on silica gel L 100/160 μm with elution by chloroform-methanol mixtures with increasing concentrations of the latter:

Compound	mp, °C	M ⁺	$\lambda_{\text{max}}^{\text{CH}_3\text{OH}}$, nm
VII. C ₁₅ H ₁₀ O ₆	349-351	271	268, 337
VIII. C ₁₅ H ₁₀ O ₆	328-330	286	255, 268, 358
IX. C ₁₅ H ₁₀ O ₈	308-310	318	256, 352

On the basis of the results of UV spectroscopy with ionizing and complex-forming reagents and PMR spectroscopy, substance (VII) was identified as apigenin [2] and (VIII) as luteolin [3, 4], as was confirmed by the absence of depressions of the melting points of mixtures of the compounds isolated with authentic samples and the identity of their spectra.

UV spectroscopy with ionizing and complex-forming reagents showed the presence in (IX) of hydroxy groups in positions 3', 4', 5, 6, and 7. In the PMR spectrum of substance (IX) taken in deuteropyridine there were the signals of the following protons (ppm): H-2' (d, 7.87, 1H, J = 2.5 Hz); H-6' (q, 7.52, 1H, J₁ = 2.5 Hz, J₂ = 8.5 Hz), H-5' (d, 7.26, 1H, J = 8.5 Hz) and H-3 (s, 6.71, 1H).

In the PMR spectrum there were no signals of a proton or of other groupings in position 8 of the flavone. Consequently, there was a hydroxy group in this position and the compounds had the structure of 3',4',5,6,7-hexahydroxyflavone, which is a new compound not described in the literature.

This is the first time that luteolin and apigenin have been isolated from the genus *Mentha*.

LITERATURE CITED

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