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UDC 615.322

We have found no information in the literature available to us on the chemical composition of Herniaria polygama J. Gay, preparations of which in the form of tinctures and liquid extracts are used in dropsy and diseases of the kidneys and of the bladder [1]. There is only information on the presence in it of triterpene saponins, which are represented by glabrosides A, B, and C [2].

Three substances in combination (I, II, and III) were isolated by chromatography on polyamide sorbent. They were separated into the individual compounds on a column (25 × 10 cm) of 100/250 μm silicagel. Elution was performed successively with chloroform and with chloroform-methanol with an increase in the concentration of the latter from 10 to 40%.

Substance (I), C₁₅H₁₀O₇, mp 307-310°C, λ_{max} 375, 255 nm, was quercetin.

Substance (II), C₁₆H₁₂O₇, mp 304-307°C (melting point of the acetate 207-210°C) differed from substance (I) by the presence of an OCH₃ group in the 3' position of flavonol and was isorhamnetin.

Substance (III), C₂₇H₃₀O₁₆, mp 189-191°C, [α]_D²⁰ -8° (c 0.1; methanol); λ_{max} 265, 255 nm, was quercetin 3-rutinoside (rutin) [4].

The structures of the compounds isolated were confirmed by the results of elementary analysis, by UV and IR spectroscopy, and by a study of the products of acid and enzymatic hydrolysis, and also by comparison with authentic samples.

This is the first time that flavonoids have been detected in the plant Herniaria polygama.

LITERATURE CITED

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