SCUTELLARIN FROM SORBARIA SORBIFOLIUM

V. I. Glyzin

Khimiya Prirodnykh Soedinenii, Vol. 5, No. 4, p. 322, 1969

By column chromatography on a column of polyamide sorbent (elution with 40% ethanol) we have isolated from the leaves of Sorbaria sorbifolium (Ural falsespirea) in the Khekhtsirskii reserve (Kharabov territory) a substance (I) of flavonoid nature, $C_{21}H_{18}O_{20} \cdot H_2O$ with mp 218-220°C, λ_{max} 335, 286 m μ . The hydrolysis of substance I with 10% sulfuric acid in the presence of acetic acid yielded an aglycone which, from its melting point, R_f value and the absence of a depression of the melting point in a mixture with an authentic sample, was identified as scutellarein. Glucuronic acid was detected in the mother liquor after the separation of the aglycone and neutralization with alkali to pH 5 by paper chromatography.

On the basis of the constants given, the products of hydrolysis, and a direct comparison with an authentic sample, substance I was identified as scutellarin (scutellarein 7-glycuronide) [1].

The sample of scutellarin was obtained from V. A. Bandyukova (Pyatigorsk).

REFERENCE

1. V. A. Bandyukova and Kh. Kh. Khalmatov, KhPS [Chemistry of Natural Compounds], 3, 57, 1967.

12 February 1969

Khabarovsk State Medical Institute

UDC 581.192

PHENOLIC COMPOUNDS OF HEDYSARUM NEGLECTUM

G. S. Glyzina and V. I. Bykov

Khimiya Prirodnykh Soedinenii, Vol. 5, No. 4, p. 322, 1969

By the separation on a Kapron column of a purified ethanolic extract of the herb Hedysarum neglectum we have isolated four individual phenolic compounds.

The first substance was identified as the xanthone derivative mangiferin (hedysaride) [1].

On the basis of their physicochemical constants, the products of acid and enzymatic hydrolysis, their IR and UV spectra with ionizing and complex-forming agents, and a comparison of the molecular rotations of glycosides with those of the corresponding phenyl glycosides, the other substances were identified as polystachoside (quercetin 3- β -L-arabofuranoside) [2], hyperoside [3], and quercetin 3- α -L-rhamnofuranoside [4].

REFERENCES

- 1. L. Hörhammer and H. Wagner, Recent Developments in the Chemistry of Natural Phenolic Compounds, Pergammon Press, 185, 1961.
 - 2. L. Hörhammer, Mitarbeiter. Arch. Pharmaz., Ber. dtsch. pharmaz. Ges., 288/60, 419, 1955.
 - 3. N. F. Komissarenko, V. T. Chernobai, and D. G. Kolesnikov, Med. prom. SSSR, no. 1, 25, 1965.
 - 4. V. N. Spiridonov, DAN SSSR, 169, 126, 1966.

12 February 1969

Kharabovsk State Medical Institute