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26 May 1969

Pyatigorsk Pharmaceutical Institute

UDC 547.918

HYPEROSIDE FROM EUPHORBIA PETROPHILA AND E. IBERICA

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Khimiya Prirodnykh Soedinenii, Vol. 5, No. 5, p. 442, 1969

The leaves of Euphorbia petrophila C. A. M. and E. iberica Boiss (spurges) were extracted successively with petroleum ether, chloroform, and methanol. The methanolic extracts were evaporated in vacuum, diluted with water, and extracted with ethyl acetate. The solvent was distilled off and the combined flavonoids were precipitated with chloroform. Fractional recrystallization of the combined flavonoids from each of the spurge species yielded the same substance with the composition $C_{21}H_{20}O_{12}$, mp 233-235° C (from ethanol).

A mixture of the two substances showed no depression of the melting point. Acid hydrolysis of the glycoside formed an aglycone $C_{15}H_{10}O_7$ which, from its UV spectra with ionizing and complex-forming additives, from the products of alkaline degradation, and from its pentaacetate was identified as 3,5,7,3',4'-pentahydroxyflavone (quercetin). An equimolecular amount of a sugar component, galactose, was also obtained.

A mixture with an authentic sample of hyperoside gave no depression of the melting point [1].

On the basis of a study of the hydrolysis products, UV spectroscopy, and the specific and molecular rotations of the glycoside, it has been established that it is quercetin $3-O-\beta-D$ -galactopyranoside.

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28 May 1969

Pyatigorsk Pharmaceutical Institute

UDC 547.972

RUTIN AND FLAVONOID COMPOUNDS FROM THE LEAVES OF DUSSIA Spp.

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Khimiya Prirodnykh Soedinenii, Vol. 5, No. 5, p. 442, 1969

We have found compounds of a flavonoid nature in ethanolic extracts of the leaves of several southern- and central-American species of Dussia Taub. (Leguminosae).

The optimum extraction of these compounds from the materials was achieved with 70% ethanol. We succeeded in separating these compounds by paper chromatography (FN-16 paper) [1]. In D. martiniciensis Kr. et Urb. three substances were found; in D. teesmanii, three; in D. coriacea Pierce, one; in D. mexicana (Standl.) Harms., two; and in D. lehmanii Harms., two. The flavonoid nature of the substances detected on the chromatograms was shown by qualitative color reactions [2].

From D. martiniciensis and D. coriacea we isolated a flavonoid with mp 189-190° C.