

Thus, the glycoside of *E-stepposa* can be characterized as myricetin 3- β -D-glucopyranoside. This is the first time that this myricetin glycoside has been isolated, and by analogy with quercetin 3-glucoside (isoquercitrin) we have called it isomyricitrin.

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STRUCTURE OF A FLAVONOID GLYCOSIDE FROM ADONIS VERNALIS

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We have previously isolated from the herb *adonis*, and studied, a flavonoid glycoside which is, according to our data, a monoxyloside of homoorientin [1].

We have also studied the flavonoid composition of the herb spring *adonis*. After the elimination of the total cardiac glycosides by chromatography on a polyamide sorbent of the aqueous residue of an extract, we obtained a flavonoid glycoside. This substance gave a positive cyanidin reaction (orange red). The pigment so obtained did not dissolve in octanol, which shows the glycosidic nature of the flavonoid compound. Its melting point was 202–205° C (decomp.), $[\alpha]_D^{20} - 22 \pm 2^\circ$ (c 1.00; in ethanol). UV spectra: λ_{\max} 257, 268, 350 m μ ; $\lambda_{\max}^{\text{CH}_3\text{COONa}}$ 268, 380 m μ ; $\lambda_{\max}^{\text{H}_3\text{BO}_3 + \text{CH}_3\text{COONa}}$ 270, 385 m μ ; $\lambda_{\max}^{\text{C}_2\text{H}_5\text{ONa}}$ 270, 410 m μ ; $\lambda_{\max}^{\text{ZrO}(\text{NO}_3)_2}$ 280, 330, 395 m μ ; $\lambda_{\max}^{\text{ZrO}(\text{NO}_3)_2 + \text{citric acid}}$ 258, 269, 350 m μ ; from the UV spectrum the glycoside has free 5-, 7-, 3'-, and 4'-hydroxy groups.

On severe hydrolysis (boiling for 2 hr with 10% hydrochloric acid), the sugar D-xylose was obtained and identified, together with two flavonoid substances which were shown by paper chromatography in the 15% acetic acid and 1-butanol–acetic acid–water (4:1:5) systems and also by spectroscopic data to be identical with authentic samples of orientin and homoorientin [2]. After hydrolysis, homoorientin and somewhat less orientin are formed.

To answer the question of the structure on which the glycoside is based, homoorientin or orientin, mild hydrolysis of the glycoside was carried out (by boiling for 5 min with 5% HCl), which gave only orientin. The latter was also formed when the xylose was split off by an enzyme preparation from the fungus *Aspergillus oryzae*.

The ratio of the specific intensities [3] at the absorption maximum at 350 m μ of the glycoside to orientin was 0.6, which characterizes it as a monoxyloside of orientin.

The results of spectroscopic studies of the glycoside and orientin show that the xylose is attached to the carbohydrate moiety of the orientin molecule. On polarimetric analysis [4] in comparison with the corresponding phenyl and methyl glycosides the bond was found to have the β -configuration and the xylose to be in the pyranose form.

Thus, the flavonoid glycoside studied, unlike *adonivernitol* [1], is a derivative of orientin and can be represented as 5, 7, 3', 4'-tetrahydroxyflavone 8-C-(β -D-glucopyranosyl-6- β -D-xylopyranoside).

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