FLAVANOIDS OF *Artemisia xanthochroa*

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We have investigated the flavonoids of leafy shoots of *Artemisia xanthochroa* Krasch., growing in the Molgolian Peoples' Republic. The material was collected by the resources prospecting division of the Combined Soviet-Mongolian Complex Biological Expedition in the Bayan-Khongorskii and the Yuzhno-Gobiiski aimaks in the flowering period in August, 1974. In a preliminary chromatographic investigation of two samples of the epigeal part of *Artemisia xanthochroa*, identical compositions of these samples were found.

From an ethanolic extract of the epigeal part of *A. xanthochroa* we isolated substances (I-V).

Substances (I) — $C_{16}O_6H_{14}$, mp 220°C, (chloroform–ethanol), $[\alpha]_D^{24.5}$ −9.1 (c 0.897%; methanol), M^+ 302, $\lambda_{max}^{CH_3OH}$, nm: 288, 333 (sh.). Substance (I) from its IR, UV, and PMR spectra and those of its acetyl derivatives (mp 165°C) was identified as 3',4',5'-trihydroxy-7-methoxyflavanone [1]. This structure was also confirmed by chemical transformations: The methylation product of (I) had mp 157°C (according to the literature: mp 156°C) [2], and the alkaline degradation of substance (I) gave protocatechuic acid.

Substance (II) — $C_{17}O_7H_{14}$, mp 286°C. $\lambda_{max}^{CH_3OH}$, nm: 256, 271, 350. PMR spectrum (DMSO, δ, ppm): 3.76 and 3.84 (2 s, 3 H each, 2 × CH_3O); 6.60 (s, H-3); 6.74 (s, H-8); 6.84 (d, J = 9 Hz, H-5'); 7.34 (m, 2 H, H-2', H-6'). The melting point of the acetate of substance (II) was 183°C. From the spectral characteristics of substance (II) and its acetate and their physical constants and the results of a comparison of them with literature information [3], substance (II) was identified as 3',4',5-trihydroxy-6,7-dimethoxyflavone — cirsiliol.

Substance (III) — $C_{17}O_6H_{14}$, mp 263°C. $\lambda_{max}^{CH_3OH}$, nm: 279, 335. On the basis of UV, IR, and PMR spectra and an absence of a depression of the melting point of a mixture with an authentic sample, isolated from *A. xerophytica* [4], substance (III) was identified as 4',5-dihydroxy-6,7-dimethoxyflavone — cirsimaritin.

Substances (IV) ($C_{18}O_7H_{16}$, mp 204°C) and (V) ($C_{16}O_7H_{12}$, mp 295°C) were identified on the basis of the identity of their IR spectra and the absence of depressions of melting points with authentic samples as cirsilineol and rhamnetin, respectively.

We are the first to have isolated may of the substances described from *A. xanthochroa*.

LITERATURE CITED

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