FLAVONOIDS OF THE INFLORESCENCES OF Callistephus chinensis

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UDC 547.972

By paper chromatography (15% acetic acid) and qualitative color reactions [1], in a methanolic extract of the inflorescences of Callistephus chinensis (common China aster, white form) we have detected two substances of flavonoid nature (I and II) with R_f 0.08 and 0.28, respectively. The substances were separated on a column of polyamide sorbent.

Flavonoid (I). C₁₅H₁₀O₅, had mp 348-350°C, mp of the acetate 184-186°C (ethanol).

On the basis of the bathochromy in the UV region, the NMR spectrum, and a comparison of the physicochemical constants with those given in the literature, it was established that (I) is apigenin (4°,5,7-tri-hydroxyflavone) [2, pp.109, 418]. This was also confirmed by the results of a direct comparison with an authentic sample.

Substance (II). $C_{21}H_{20}O_{10}$: 1.5 H_2O , had mp 178-181°C (aqueous ethanol), $[\alpha]_D^{20}$ - 86.05° (c 0.83; dimethylformamide; mp of the acetate 206-210°C.

The acid hydrolysis of (II) gave (I) and glycose, which was identified by paper chromatography in several systems, and also from the melting point of the phenylosazone.

The constants of substance (II) coincided with those given in the literature for cosmosiin [2, pp. 320, 3]. Thus compound (II) is apigenin 7-O-D-glucopyranoside (cosmosiin).

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All-Union Scientific-Research Institute of Medicinal Plants. Translated from Khimiya Prirodnykh Soedinenii, No. 3, p. 375, May-June, 1971. Original article submitted February 10, 1971.

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