

The present paper gives the results of an investigation of the ethanolic compounds isolated from the epigeal part of *Matricaria discoidea* DC., an annual weed widely distributed in the territory of the USSR.

The dry comminuted epigeal part of the plant collected in the flowering period was first freed from chlorophyll and lipophilic substances with chloroform and was exhausted with ethanol. After the ethanol had been distilled off in vacuum, the viscous extract was chromatographed on a column of polyamide sorbent in the water-ethanol system, and substances (I) and (II), of flavonoid nature, were isolated. From the chloroform extract obtained in the purification of the raw material substances (III) and (IV), of coumarin nature, were isolated with the aid of column chromatography on silica gel and elution with petroleum ether-ethyl acetate (8:2).

Substance (I) -  $C_{21}H_{20}O_{11}$ , mp 257-259°C,  $\lambda_{\text{max}}^{C_2H_5OH}$  255, 268, 350 nm.

Substance (II) -  $C_{15}H_{10}O_6$ , mp 328-330°C,  $\lambda_{\text{max}}^{C_2H_5OH}$  255, 268, 350 nm.

Substance (III) -  $C_9H_6O_3$ , mp 232-234°C.

Substance (IV) -  $C_{10}H_8O_3$ , mp 117-118°C.

On the basis of IR, PMR, and UV spectra with ionizing and complex-forming reagents [1], and also of a comparison with authentic samples, substance (I) was identified as luteolin 7-O- $\beta$ -D-glucopyranoside (cynaroside); (II) as luteolin; (III) as umbelliferone; and (IV) as herniarin.

The presence of luteolin 7-glucoside and of herniarin in the leaves and inflorescences of *M. discoidea* has been reported previously [2-4]. This is the first time that luteolin and umbelliferone have been isolated from the epigeal part of this plant.

An investigation of the qualitative composition of the polyphenols in various organs of *M. discoidea* by chromatography in the isopropanol-formic acid-water (2:5:5) and 2% acetic acid systems showed that the qualitative compositions of the polyphenol complexes in all the organs of the plant were the same and consisted of eight substances. The present investigation forms part of complex studies of the possibility of using the herbage of *Matricaria discoidea* together with the inflorescences in medical practice.

## LITERATURE CITED

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