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PHENOLIC COMPOUNDS FROM THE TUBULAR FLOWERS

of *Leucanthemum vulgare*

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We have shown previously that the flavonoid composition of the ligulate flowers of the oxeye daisy, *Leucanthemum vulgare* Lam. (family *Asteraceae*) growing on the territory of Georgia differs from that of the tubular flowers. We have isolated apigenin and glycosides of it from the ligulate flowers of this plant [1, 2].

In the present communication we report the results of a study of the tubular flowers. The air-dry raw material was subjected to preliminary extraction with chloroform and was then extracted with 80% methanol. The alcohol was distilled off from the alcoholic extract, and then the flavonoids were extracted with ethyl acetate and chromatographed on a column of polyamide sorbent with the use as eluent of aqueous alcohol containing increasing concentrations of ethanol. As a result, nine individual compounds were obtained, two of which were phenolic carboxylic acids and seven were flavonoids. They were identified from their physicochemical properties and UV and IR spectra and by comparison with authentic samples.

Substance (I) (mp 202-204°C) was chlorogenic acid [3]; (II) (mp 193-196°C) caffeic acid [3]; (III) (mp 189-191°C) rutin [4]; (IV) (mp 235-237) hyperin (quercetin 3-galactoside) [4]; (V) (mp 224-226°C) chrysin 7-glucuronide [5]; (VI) (mp 315-317°C) quercetin [4]; (VII) (mp 329-331°C) luteolin [4]; (VIII) (mp 299-302°C) isorhamnetin [5]; and (IX) (mp 287-290°C) chrysin [5].

This is the first time that any of these substances have been isolated from the tubular flowers of *L. vulgare*.

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