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In the epigeal organs of *Linaria macroura* M. B. Chay, a plant endemic to the south of the Ukraine and Ciscaucasia [1] that was collected in the environs of Zaporozh'e, by qualitative reactions and paper chromatography (PC) we have detected hydroxycinnamic acids, iridoids, aurones, flavonols, and flavones. Using a procedure described by one of the authors [2], from the epigeal part of the plant we have isolated 15 substances (I-XV) in the individual state. The results of physicochemical methods of investigation and of direct comparison with authentic samples has permitted the identification of individual substances as caffeic acid (I), chlorogenic acid (II), aucubin (III), catalpol (IV), isocatalpol (V), myricetin (VI), quercetin (VII), apigenin (VIII), luteolin (IX), diosmetin (X), and acacetin (XI). According to their mobilities on PC, substances (XII)-(XIV) were assigned to the monoglycosides and substance (XV) to the biosides. Substance (XII), with the composition $C_{21}H_{20}O_{10}$, had mp 223-226°C; (XIII), with the composition $C_{21}H_{20}O_{11}$, had mp 264-268°C; (XIV), with the composition $C_{22}H_{22}O_{11}$, had mp 267-270°C; and (XV), with the composition $C_{28}H_{32}O_{15}$, had mp 279-282°C. In the products of acid hydrolysis by a mixture of equal amounts of 2% H_2SO_4 and 10% CH_3COOH in 50% ethanol, apigenin, luteolin, diosmetin, and D-glucose were found (for substances (XII)-(XIV), respectively) and diosmetin, D-glucose, and L-rhamnose for substance (XV). Substances (XII)-(XIV) were cleaved by the action of the hydrolases from the fungus *Aspergillus oryzae*. Diosmetin and rutinose were detected by paper chromatography in the products of the enzymatic hydrolysis of substance (XV) by the stereospecific enzyme preparation rhamnodiastase. According to investigations with ionizing and complex-forming reagents [3], in substances (XII)-(XV) the carbohydrate components were present in position 7 of the flavone nucleus.

On the basis of the facts given above, the glycosides isolated were characterized as the 7-O- β -D-glucosides of apigenin (substance (XII)), of luteolin (XIII), and of diosmetin (XIV), and the 7-O-rutinoside of diosmetin (XIII). It must be mentioned that the amounts of derivatives (I-V) in the vegetative and reproductive organs were similar, while the aurones and flavonols were present only in the inflorescences. Glycosides (X) and (XII) predominated in the leaves and stems, with considerably smaller concentrations of the glycosides (VIII) and (IX). This is the first time that myricetin derivatives have been isolated from species of the family Scrophulariaceae.

LITERATURE CITED

1. Flora of the URSR [in Russian], Kiev, Vol. (IX) (1960), p. 4-5.
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3. V. I. Litvinenko and N. M. Maksyutina, *Khim. Prir. Soedin.*, 420 (1965).