Yu. E. Sklyar, V. B. Andrianova, and M. G. Pimenov

UDC 547.9:582.80

Information on the chemical composition of  $Ferulago\ confusa\ Vel.\ [F.\ meoides\ (L.)\ Boiss]$  [1, 2] and  $F.\ subvelutina\ Rech.\ f.\ (F.\ turkomanica\ Schnickh.)$  [3] indicates considerable differences in the sets of individual coumarins of these two species. The coumarins of  $F.\ sylvatica\ (Bess.)\ Reichenb.\ have not been studied previously.$ 

As the result of the chromatography of an acetone extract of the roots of F. sylvatica (collected on July 19, 1974, in Transcarpathia) on silica gel L 40/100 µm in mixtures of petroleum ether and ethyl acetate with gradually increasing concentrations of the latter, the following coumarin derivatives were isolated: (I),  $C_6H_{14}O_4$ , mp 104-106°C; (II),  $C_{19}H_{20}O_5$ , mp 136-138°C; (III),  $C_{16}H_{14}O_5$ , mp 138-140°C; (IV),  $C_{21}H_{18}O_5$ , mp 133-134°C,  $[\alpha]_D^{19}-101.4$ ° (c. 0.2; CHCl<sub>3</sub>); and (V),  $C_6H_{16}O_6$ , mp 130-132°C.

On the basis of their PMR spectra and a comparison of their IR spectra with those of authentic samples, and the absence of depressions of the melting points in the corresponding mixtures, the compounds isolated were identified as isoimperatorin (I), pranchimgin (II), oxypeucedanin (III), felamedin (IV), and oxypeucedanin hydrate (V).

Thus, F. sylvatica contains the same substances as F. confusa (F. meoides), which shows the taxonomic closeness of these species.

## LITERATURE CITED

- 1. I. Ognyanov and D. Bocheva, Z. Naturforsch., <u>B22</u>, No. 11, 1231 (1967).
- 2. I. Ognyanov and D. Bocheva, Planta Med., 17, No. 1, 65 (1969).
- 3. V. B. Andrianova, Yu. E. Sklyar, and M. G. Pimenov, Khim. Prir. Soedin., 514 (1975).

All-Union Scientific-Research Institute of Medicinal Plants, Moscow. M. V. Lomonosov Moscow State University. Moscow Botanical Garden. Translated from Khimiya Prirodnykh Soedinenii, No. 4, p.518, July-August, 1982. Original article submitted March 29, 1982.