COUMARINS OF THE ROOTS OF Ferula foetidissima

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Continuing a study of species of Ferula of the subgenus Narthex (Falc.) Drude, we have investigated the coumarins of the roots of Ferula foetidissima Regel et Schmalh. collected in the type site of this plant (TadzhSSR, Zeravshan range, R. Iskanderdar'ya) in August, 1972. From an extract obtained by the treatment of the comminuted roots with carbon tetrachloride, by chromatography on a column of alumina (activity grade II) we have isolated two coumarins, with Rf 0.85 (I) and 0.54 (II) [TLC, Silufol, chloroform—ethanol (97:3) system]. The yields of these substances on the weight of the dry raw material were 0.16 and 0.20%, respectively.

On the basis of their IR and NMR spectra and the absence of depressions of the melting points of mixtures with the appropriate authentic samples, compound (I) having the composition $C_{24}H_{28}O_4$ (M⁺ 380), mp 141-141.5°C (ethyl acetate-petroleum ether) and compound (II), having the composition $C_{24}H_{30}O_4$ (M⁺ 382), mp 137-138°C (diethyl ether-petroleum ether) were identified as conferone [1] and conferol [2], respectively.

Thus, the isolation from <u>F. foetidissima</u> of conferone and conferol, which have been obtained previously from <u>Ferula conocaula</u> Korov. [1, 2] indicates the taxonomic closeness of these species of the subgenus Narthex (Falc.) Drude.

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