Phenolic Acid Methyl Esters	Relative Retention Time	Amount %
Benzoic	1.00	59.0
p-Hydroxybenzoic	1.75	23.5
Cinnamic	2.98	3.7
p-Coumaric	5.89	9.3
Vanillic combined Protocatechnic	10.27	4.5

The retention time of benzoic acid (56 sec) was taken as 1.

Thus, it has been established by paper and gas-liquid chromatography that Mongolian ephedra contains six phenolic acid: benzoic, p-hydroxybenzoic, cinnamic, p-coumaric, vanillic, and protocatechuic.

COUMARINS OF Ferula syreitschikowii

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On studying the roots of Ferula syreitschikowii K. Pol. (Syreishchikov's giant fennel) collected by us in April in the mountains of Karaktau, we found in them a considerable amount of coumarins, consisting of a mixture of six substances. Extraction with ethanol and adsorption chromatography on a column of KSK silica gel with elution by mixtures of petroleum ether and ethyl acetate in various proportions led to the isolation of three furocoumarins with the compositions $C_{19}H_{20}O_5$, mp 138-140°C, $C_{16}H_{14}O_4$, mp 102-103°C, and $C_{16}H_{15}OCl$, mp 145°C. On the basis of mixed melting points and IR spectroscopy they were identified, respectively, as pranchimgin, isolated previously from Ferula nuda Spreng [1], imperatorin, and saxalin.

From the fraction of water-soluble substances we isolated two furocoumarins with the compositions $C_{16}H_{14}O_5$, mp $141-143^{\circ}C$, and $C_{16}H_{16}O_6$, mp $132-134^{\circ}C$; these were identified by means of their IR spectra as oxypeucedanin and oxypeucedanin hydrate, which have been isolated previously from <u>Peucedanum officinale</u> L. [2], Angelica sylvestris L. [3] and other plants. Furocoumarins have been detected previously in only one species of <u>Ferula - Ferula nuda</u> Spreng., which belongs to the section Xeronarthex. This is the first time that they have been isolated from the section Neonarthex to which <u>Ferula syreitschikowii</u> belongs.

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