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In nature, Ferula soongarica Pall. ex Spreng is known as nutritious food and a valuable medicinal plant. It is used in folk medicine under the name "skipidarnii koren'" ["turpentine root"] as an antirheumatic and antineurotic agent, and in veterinary medicine for the treatment of gastric diseases of young animals [1].

This species has not been subjected to detailed chemical study although there is information on the total amount in its roots of resin, essential oils, sugars, etc. [1].

We have investigated the roots of Ferula soongarica collected in the territory of Kazakhstan close to Lake Sasyk-Kul'. The combined phenolic components obtained by the usual method from an ethanolic extract of the roots were chromatographed on silica gel with elution by hexane—chloroform in ratios of 3:1, 2:1, 1:1, and by chloroform. Three compounds were isolated: C₂₃H₃₂O₅, mp 75-80°C; C₂₂H₃₀O₄, mp 120-121°C; and C₂₃H₃₂O₅, mp 130-131°C. On the basis of their physicochemical constants and spectral characteristics and a comparison with authentic samples, they were identified as esters of ferutinol — teferin, ferutinin, and ferutin, respectively [2].

By chromatographic separation of the fraction of neutral substances using mixtures of hexane with chloroform (10:1:2:1) as eluents, we obtained lapiferin $C_{22}H_{34}O_{6}$, mp 137-138°C, which was first detected in F. lapidosa [3], and ferrutinol (jaschkeanadiol), $C_{15}H_{26}O_{2}$, mp 91-93°C. Hitherto, the latter has been isolated from only one species – F. jaeschkeana — although its acyl derivatives are fairly widely distributed in many species of Ferula [5, 6].

Ferula subtilis Korov. is a narrowly endemic species and has been investigated for the first time. The raw material was collected in the Arpalyk mountains, Kirghiz SSR. By separating the phenolic fraction of the total extractive substances from the roots of this species on a column of silica gel (with chloroform as eluent), we isolated two sesquiterpenoids of the humulane series — ferocin, C₂₂H₂₈O₃, mp 127-128°C, and ferocinin, C₂₃H₃₀O₄, mp 107-108°C [7]. In its chemical composition, F. subtilis is closest to F. ceratophylla and not to species of the Phyllites section (F. kelleri, F. samarkandica, etc.) to which this species has hitherto been assigned [8].

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