

COUMARINS FROM THE ROOTS OF Prangos lamellata

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We have studied the coumarin composition of the roots of Prangos lamellata Korov. collected in the region of the village of Urgut, Samarkand province, Uzbek SSR. A chloroform extract of the roots of this species of Prangos was subjected to chromatography on a column of neutral alumina (Brockmann activity grade III). Elution was performed with petroleum ether, petroleum ether-chloroform (5:1, 3:1, 2:1, and 1:1), chloroform, and ethanol.

Osthole (about 0.1% on the dry weight of the raw material) and (-)-oxypeucedanin were isolated and were identified from their melting points, mixed melting points with authentic samples, and IR spectra. Meranzin, meranzin hydrate, psoralen, bergapten, imperatorin, prangenin, prangenin hydrate, isoimperatorin, oxypeucedanin hydrate, marmezin, and deltoin were identified by paper chromatography (with markers) before and after treatment of the chromatograms with solutions of alkali and diazo compounds [1]. Analysis by gas-liquid chromatography of the coumarin fraction from the roots of this plant performed under the conditions described previously [2] confirmed the presence of the coumarin and furocoumarin derivatives mentioned in the roots of Prangos lamellata.

Osthole is the main component of the coumarin derivatives of the roots of this plant.

LITERATURE CITED

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