COUMARINS OF Seseli dichotomum, S. ponticum, AND S. petraeum

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We have investigated three representatives of the type section of the genus Seseli growing in the Crimea and in the Caucasus. The herbage of S. dichotomum was collected in the environs of Belogorsk (Crimea) and of S. pontioum in the environs of Tuapse (Krasnodar territory) and the roots of S. petraeum in the environs of Kislovodsk.

The comminuted herbage was extracted with acetone and the evaporated extract was distributed between petroleum ether and methanol. The methanolic phase containing the coumarins was chromatographed on silica gel L  $40/100~\mu$  in the petroleum ether—ethyl acetate system with a gradientwise increase in the concentration of the latter. The roots of S. petraeum were extracted with petroleum ether, and the concentrated petroleum ether extract was chromatographed by the method described above.

From all the species mentioned we isolated anomalin,  $C_{24}H_{26}O_{7}$ , mp  $174-175^{\circ}C$ ,  $[\alpha]_{D}^{22}-30^{\circ}$  (c 1.0; CHCl<sub>3</sub>), identical according to its IR and NMR spectra and a mixed melting point with an authentic sample. From S. ponticum and S. dichotomum we obtained (with yields of 0.22 and 0.24%, respectively), xanthogalin,  $C_{19}H_{20}O_{5}$ , mp  $100-101^{\circ}C$ ,  $[\alpha]_{D}^{22}-15^{\circ}$  (c 1.0; CHCl<sub>3</sub>), identical with an authentic sample according to IR and NMR spectra and an absence of a depression of the melting point on a mixture. From S. dichotomum we isolated a very small amount of bergapten,  $C_{12}H_{9}O_{4}$ , mp  $189-190^{\circ}C$ , identical with an authentic sample according to its NMR spectrum and a mixed melting point.

Thus, the PCs studied are close not only in morphological characteristics but also in chemical composition, which confirms the desirability of assigning them to one section [1].

## LITERATURE CITED

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