COUMARINS OF *Prangos latiloba*

S. V. Serkerov, A. A. Kagramanov, R. M. Abbasov, and A. M. Aliev

UDC 577.15/17:582.89

By chromatographic separation on a column of alumina, from the resin of the roots of *Prangos latiloba* Eug. Kor., collected in the Turkmen SSR, we have isolated six crystalline substances of courmarin nature in the individual state.

Substance (I), $C_{19}H_{20}O_5$, mp 138-140°C, on being heated with a 5% ethanolic solution of KOH formed a hydroxylactone $C_{14}H_{14}O_4$ with mp 186-188°C and an acid $C_5H_8O_2$ with mp 68°C identified on the basis of the comparison of IR spectra as marmesin and senecioic acid. On the basis of these results and the IR spectra, compound (I) was identified as pranchimgin [1].

Substance (II), $C_{16}H_{14}O_4$, mp 107-108°C, was identified by its composition, melting point, and IR spectrum as isoimperatorin.

Substance (III), $C_{16}H_{14}O_5$, mp 140-142°C, on being boiled with 10% sulfuric acid formed a substance $C_{16}H_{14}O_5$ (mp 140-142°C), the IR spectrum of which coincided with the spectrum of isooxypeucedanin. The formation of isooxypeucedanin, and also the results of a comparison of the IR spectra of (III) and oxypeucedanin, permitted the substance to be identified as oxypeucedanin.

Substance (IV), $C_{16}H_{16}O_6$, mp 131-132°C, just like (III), on being heated in an ethanolic solution with HCl was converted into isooxypeucedanin, which was identified by a comparison of IR spectra. This showed that substance (IV) was oxypeucedanin hydrate.

Substances (V), $C_{16}H_{14}O_5$, mp 143-146°C, and (VI), $C_{14}H_{14}O_4$, mp 186-188°C, were obtained in very small amounts. By a comparison of their IR spectra they were identified as isooxypeucedanin and marmesin, respectively.

The IR spectra were taken on a UR-20 spectrophotometer in paraffin oil.

LITERATURE CITED

1. G. A. Kuznetsova, Natural Coumarins and Furocoumarins, [in Russian], Leningrad (1967).

V. L. Komarov Institute of Botany, Academy of Sciences of the Azerbaidzhan SSR, Baku. Mardakyan Tree Park of the V. L. Komarov Institute of Botany, Academy of Sciences of the Azerbaidzhan SSR, Baku. N. Narimanov Azerbaidzhan State University, Baku. Translated from Khimiya Prirodnykh Soedinenii, No. 1, pp. 94-95, January-February, 1976. Original article submitted July 9, 1975.