

## PARTIAL SYNTHESIS OF ( $\pm$ )-PRANFEROL

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UDC 577.15/17:582.89

The present paper gives the results of a partial synthesis of ( $\pm$ )-pranferol.

By the reduction of isoxypeucedanin, obtained by the isomerization of natural oxypeucedanin with 20% sulfuric acid, in methanol with sodium tetrahydroborate we obtained substance (I),  $C_{16}H_{16}O_5$ , mp 111-112° C (from benzene),  $[\alpha]_D^{20} \pm 0^\circ$  (chloroform),  $R_f$  0.66 ( $Al_2O_3$  of activity grade II in the ethyl acetate system).

The IR spectrum of (I) coincided completely with that for pranferol [1]. A mixture with an authentic sample gave no depression of the melting point.

The acetylation of (I) with acetic anhydride in pyridine formed an acetyl derivative (II),  $C_{18}H_{18}O_6$ , mp 116.5-117.5° C (from petroleum ether),  $R_f$  0.86 [ $Al_2O_3$ , activity grade II, ethyl acetate-benzene (1:2) system] In the IR spectrum of the latter the hydroxy group absorption band had disappeared and in addition to the band of the C=O group of an  $\alpha$ -pyrone ring ( $1730\text{ cm}^{-1}$ ) the absorption band of an ester carbonyl group had appeared ( $1740\text{ cm}^{-1}$ ).

### LITERATURE CITED

1. G. A. Kuznetsova, A. Z. Abyshv, M. E. Perel'son, Yu. N. Sheinker, and G. Yu. Pek, *Khim. Prirodn. Soedin.*, **2**, 310 (1966).

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Leningrad Sanitary-Hygienic Medical Institute. Translated from *Khimiya Prirodnikh Soedineni*, No. 4, p. 522, July-August, 1972. Original article submitted March 18, 1971.

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