

## KETOPELENOLIDE b FROM *Artemisia anethifolia*

R. I. Evstratova and A. M. Sinyukhin

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From the epigeal part of *Artemisia anethifolia* Web., family Compositae, collected in the Tuva ASSR in August, 1970, we have isolated by extraction with water a colorless crystalline substance with the composition  $C_{15}H_{26}O_3$ , mp 173-175°C (from ethanol)  $[\alpha]_D^{20} +195^\circ$  (c 0.78; ethanol). Yield 0.1%.

The IR spectrum of the substance has absorption bands at  $1755\text{ cm}^{-1}$  ( $\gamma$ -lactone),  $1705\text{ cm}^{-1}$  ( $-C=O$ ), and  $1655\text{ cm}^{-1}$  ( $C=C$ ). UV spectrum:  $\lambda_{\text{max}}$  206 and 293 nm ( $\log \epsilon$  3.46 and 2.89). The NMR spectrum has a pair of doublets (6H) at 1.04 and 1.14 ppm (two  $CH_3$  groups attached to CH), a singlet (3H) at 1.63 ppm ( $CH_3$  on a double bond), a quartet at 3.52 ppm (lactone proton), and a triplet at 5.47 ppm (vinyl proton). The assignment of the signals of the lactone and vinyl protons was made with the aid of double resonance. By comparing our results with literature information, we came to the conclusion that the substance obtained was identical with ketopelenolide b - a sesquiterpene lactone isolated previously from *Artemisia absinthium* L. [1, 2].

### LITERATURE CITED

1. V. Herout and F. Šorm, Chem. Listy, **50**, 586 (1956).
2. M. Suchy, Z. Samek, V. Herout, R. B. Bales, G. Snatzke, and F. Šorm, Collection Czech Chem. Commun., **32**, No. 11, 3917 (1967).

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