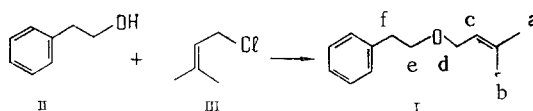


Among the 65 identified components of the essential oil of *Hibiscus syriacus* L. (shrub althea), which is an alternative host of *Anthonomus grandis* Boheman (the boll weevil), 1.2% of a hitherto unknown compound — phenethyl 3-methylbut-2-enyl ether, or 2-methyl-7-phenyl-5-oxahept-2-ene (I), has been found [1]. The use of (I) as a perfume material and its synthesis were later described in a paper [2] according to which (I) was obtained from  $\beta$ -phenylethanol (II) by conversion into the corresponding alkoxide by heating with sodium hydride followed by treatment with prenyl chloride (III), the yield amounting to 57%.

We have synthesized (I) without using sodium hydride by the direct reaction of  $\beta$ -phenylethanol with prenyl chloride under the conditions of phase-transfer catalysis.



To 130 g of prenyl chloride was added 224 g of a 50% aqueous solution of caustic potash, 250 g of  $\beta$ -phenylethanol, and 2 g of triethylbenzylammonium chloride, whereupon spontaneous heating was observed. The mixture was stirred at 55–58°C for 4 h, and then 30 ml of water was added and, after heating at 70–75°C for 2 h to saponify the unchanged (III), the mixture was cooled and the organic layer was fractionated in a column with an efficiency of 7–8 theoretical plates. This yielded 161.5 g of (II) that had not taken part in the reaction and 128.0 g of (I); yield 93%, calculated on the (II) that had reacted; purity 99.5% (GLC), bp 138–139°C (10 mm);  $d_4^{20}$  0.9382;  $n_D^{20}$  1.5056;  $MR_{\text{found}}$  60.62,  $MR_{\text{calc}}$  59.81. The IR spectrum was obtained on a Spectord 75 IR instrument (GDR) in carbon tetrachloride;  $\nu$  ( $\text{cm}^{-1}$ ): 1080 (C–O–C); 1360 (gem-CH<sub>3</sub> at C=C); 1500, 1600 (aromatic C=C); 1670 (C=C). The PMR spectrum was taken on a Bruker WM-250 instrument (GFR) in deuteriochloroform,  $\delta$  (ppm): 1.65 and 1.73 (s, H<sub>a</sub>, H<sub>b</sub>); 2.89 (t, H<sub>e</sub>); 3.61 (t, H<sub>f</sub>); 3.96 (d, H<sub>d</sub>); 5.34 (m, H<sub>c</sub>); 7.26 (m, aromatic H).

According to the literature [2]: bp 68–74°C (0.5 mm),  $n_D^{20}$  1.5052.

The IR spectrum was taken by M. M. Emel'yanov, and the PMR spectrum by N. A. Novikov.

## LITERATURE CITED

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