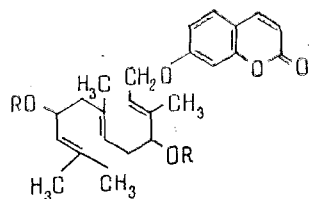


Tadzhiferin (I) and tadhikorin (II) have been isolated previously from the fruit of *Ferula tadshikorun* M. Pimen [1].

An acetone extract of the roots of *F. tadshikorun* yielded by column chromatography on silica gel L 40/100 in petroleum ether-ethyl acetate not only umbelliferone (mp 230-232°C), tadzhiferin (I) ($C_{24}H_{30}O_4$, mp 66-70°C), and tadhikorin ($C_{26}H_{32}O_6$, liquid identified on the basis of its IR and PMR spectra), but also a terpenoid coumarin $C_{24}H_{30}O_5$, M^+ 398, mp 64-66°C. The IR spectrum of the substance had a broad hydroxyl band at 3300 cm^{-1} . The PMR spectrum (Varian, HA-100D, $CDCl_3$, 0 - TMS) showed the signals of the following functional groups (δ , ppm): 4 $CH_3-C=C$ (1.61, s, 1.81, s, 2 H, 1.69, s, 6 H); 2 $CH_2-C=C$ (2.05-2.35, m, 4 H); 2 $HO-C$ (3.33, m, 2 H); 2 $C=C-CH-OH$ (4.01, t, $\Sigma J = 14$ Hz, 1 H, and 4.60 m, 1 H); CH_2OAr (4.60, d, 7.0 Hz, 2 H); 2 $C=CH-CH_2$ (5.06, 1 H, t, $\Sigma J = 16$ Hz, and 5.57, t, 1 H, $J = 14.0$ Hz); $C=CH-CH$ (5.44, d, 1 H, 9 Hz); and the signals of 7-hydroxycoumarin: H_3 (6.24, 1 H, d, 9.5 Hz); H_4 (7.63, 1 H, d, 9.5 Hz); H_5 (7.35, 1 H, d, 9.0 Hz); H_6 (6.84, 1 H, q; $J_1 = 9.0$ Hz, $J_2 = 2.5$ Hz); H_8 (6.79, 1 H, br. s, $W_{1/2} = 2.5$ Hz).

On the basis of these results, the substance can be ascribed the structure of deacetyltadhikorin (IV), which has been obtained previously [1] by the hydrolysis of (II).

A comparison of the IR and PMR spectra of this substance isolated and (IV) showed their complete identity. The acetylation of the compound isolated with $(CH_3CO)_2O$ in pyridine gave the diacetate (V), $C_{28}H_{34}O_7$, identical according to IR and PMR spectroscopy with tadhikorin [1].



IV. R = H

V. R = $COCH_3$

LITERATURE CITED

1. M. E. Perel'son, V. V. Vandyshev, Yu. E. Sklyar, K. Vezhkovska-Renke, N. V. Veselovskaya, and M. G. Pimenov, *Khim. Prir. Soedin.*, 593 (1976).
2. I. A. Kir'yanova, Yu. E. Sklyar, M. G. Pimenov, and Yu. V. Baranova, *Khim. Prir. Soedin.*, 573 (1979).