ANHYDROAUSTRICIN FROM *Artemisia albida*

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UDC 547.314

We isolated previously from *Artemisia albida* Willd. the sesquiterpene lactones austricin, matricarin, canin, and argolide in addition to the flavonoids eupatilin and its 5′-methyl ester [1].

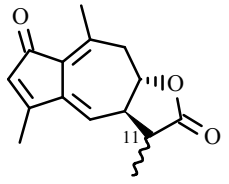
In continuation of research on the chemical composition of the aerial part of *A. albida* collected during budding near Ivanov crest (Altai) in August 2004, the residue obtained by water extraction of raw material (4 kg) with subsequent $CHCl_3$ extraction of the aqueous extract was separated chromatographically over a column of silica gel using petroleum ether:ethylacetate (4:1) to isolate crystalline **1**, dark-yellow, $C_{15}H_{16}O_3$, mp 204-206°C (ethylacetate), yield 0.005%.

The IR spectrum (cm^{-1}) of **1** contained a strong band for γ-lactone carbonyl (1774), a carbonyl conjugated to a five-membered ring (1679), and a C=C bond (1623).

The PMR spectrum showed a 3H doublet for the C-11 methyl at 1.3 ppm (J = 8 Hz); singlets for methyls of the C-4 and C-10 double bonds at 2.1 and 2.4 ppm, respectively; a triplet of doublets for the C-8 proton at 4.5 ppm ($J_1 = J_2 = 10$ Hz, $J_3 = 4$ Hz); a doublet for the C-6 proton at 5.8 ppm, and a singlet for the C-3 proton at 6.07 ppm.

Comparison of the results with the literature led to the conclusion that we isolated anhydroaustricin (**1**), which has been previously synthesized from austricin [2, 3] (anhydroaustricin was also given the name dehydroisoleucomisin [4]) and isolated from *A. leucodes* Schrenk. [4, 5].

Anhydroaustricin in addition to dehydroisoleucomisin were erroneously called anhydrogrossmisin (**2**) [6, 7], which was obtained in fact from grossmisin although references are given for anhydroaustricin. Therefore, differences in the melting point and PMR spectrum are observed.



1, 2

1: β-CH_3-11-anhydroaustricin
2: α-CH_3-11-anhydrogrossmisin

Anhydroaustricin **(1)** was isolated from *A. albida* for the first time.

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