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TWO PHENOLIC COMPOUNDS FROM *Aconitum baicalense*

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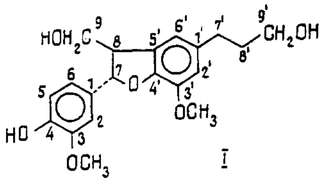
When the chloroform fraction of the total alkaloids from the epigeal part of *Aconitum baicalense* was separated, two phenolic compounds were obtained.

To isolate compound (I) we used column chromatography on alumina. The eluent was chloroform–methanol (10:1). After the additional purification of (I) with the aid of HPLC (2.5 × 250 mm column; Nucleosil-5, C_{18}; eluent 45% MeOH; detection at 210 nm) an oily substance was isolated with the composition $C_{20}H_{24}O_6$, $[\alpha]_D^{20}$ +6.6 ($CHCl_3$). Mass spectrum: m/z 360 (M^+). UV spectrum: λ_{max}^{MeOH} 280 nm. A comparison of this spectral information with the literature permitted compound (I) to be identified as 3β-hydroxymethyl-5-(3-hydroxypropyl)-7-methoxy-2α-(3-methoxy-4-hydroxyphenyl)benzo-[b]furan (dihydrodiconiferyl alcohol). Table 1 gives a complete assignment of the signals in the ^{13}C and ^1H NMR spectra. The position of the phenolic hydroxyl was established by an analysis of the ^{13}C and ^1H chemical shifts observed after the action of trichloroacetyl isocyanate [2], which are given in the Δ column of the table. The relative stereochemistry at the C-7 and C-8 atoms was deduced on the basis of the absence of a nuclear Overhauser effect between the protons attached to them.

Compound (II), with the composition $C_9H_{12}O_3$ and a molecular mass of 168, was isolated with the aid of column chromatography on silica gel with elution by chloroform. On comparing the physicochemical characteristics of this compound with the literature [3], it was identified as 2-(3-methoxy-4-hydroxyphenyl)ethanol. As in the case of compound (I), the position of the hydroxyl was established by an analysis of the ^1H chemical shifts observed under the action of trichloroacetyl isocyanate. The ^{13}C NMR spectrum of compound (II) agrees with the proposed structure.



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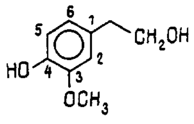

II

TABLE 1. Chemical Shifts in the ^{13}C and ^1H NMR Spectra of Dihydrodiconiferyl Alcohol

№	C, ppm	ΔC, ppm	H(δ, ppm J,Hz)	ΔH, Hz	№	C, ppm	ΔC, ppm	H(δ, ppm, J,Hz)	ΔH, Hz
1	133,11	5,4			1′	127,75	—1,8		
2	108,82	1,6	6,93; s		2′	112,42	0,8	6,66; d; 3,3	14
3	146,64	4,8		92	3′	144,19	0,3		
4	146,55	—6,0			4′	145,60	—0,9		
5	115,94	6,8	6,86; d; 8,0		5′	135,41	—0,5		
6	119,42	—1,4	6,88; dd; 8,0 i 1,5	122	6′	114,28	2,2	6,66; d; 3,3	14
7	87,88	—0,8	5,53; d; 7,4	46	7′	34,61	—2,8	2,64; m	25
8	53,80	—2,8	3,59; m	33	8′	32,00	—1,9	1,85; m	92
9	63,01	4,9	3,93; q; 5,9; 11,0	20	9′	62,29	4,5	3,67; t; 6,3	304
			3,86*	320	OMe	56,00	0,2	3,83; s	
						56,00	0,3	3,85; s	

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*Masks the signal of the methoxy group.

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These two compounds have not been isolated from *A. baicalense* previously.

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