(IV) with trifluoroacetic acid at 20°C in the presence of anisole as protector. The leucine-B^{30}-[human insulin] (I, R = de-Thr^{B30}-[human insulin]) formed was isolated from the reaction mixture with the aid of gel filtration on Sephadex G-25 F. The course and degree of purification were monitored by thin-layer chromatography on silica gel, electrophoresis on cellulose, and disc electrophoresis in polyacrylamide gel.

After lyophilization of the eluate, leucine^{B30}-[human insulin] (I) was obtained in the analytically pure state.

Leucine^{B30}-[human insulin] (I). R_f 0.52 (C_5H_5N—C_4H_9OH—CH_3CO_2H—H_2O (10:15:3:12)), 0.65 (iso-C_3H_7OH—25% NH_4OH (7:4)), 0.80 (C_5H_5N—CH_3COCH_3—H_2O (2:1:1)), 0.94 (iso-C_3H_7OH—25% NH_4OH—H_2O (7:4:6)) (TLC on Silufol UV-254, visualization with Pauly's reagent [2]). Electrophoretic mobility: 1.35 (electrophoresis on Whatman No. 1 paper, pH 1.9, 450 V, 7 mA. Reference standard — the bis-S-sulfonate of the B chain of human insulin).

Amino acid analysis: Asp 2.90; Thr 1.60 (2); Ser 2.70 (3); Glu 7.10 (7); Pro 1.10 (1); Gly 4.00 (4); Ala 1.20 (1); Cys 5.40 (6); Val 3.45 (4); Ile 1.65 (2); Leu 6.85 (7); Tyr 3.25 (4); Phe 2.85 (3); His 1.85 (2); Lys 0.95 (1); Arg 0.95 (1). Results of the determination of C-terminal amino acids: Asn 0.95 (1); Leu 0.98 (1).

When tested for its convulsive effect in mice [3], the biological activity of compound (I) amounted to 90% (in comparison with the activity of the international standard).

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COMPONENTS OF THE LEAVES OF *Phillyrea latifolia*

I. S. Movsumov, A. M. Aliev, and Yu. B. Kerimov

UDC 547.9

We have investigated the leaves of the evergreen tree *Phillyrea latifolia*, family Oleaceae, collected in the Botanical Garden of the Academy of Sciences of the Azerbaidzhan SSR at the beginning of October, 1981. The air-dry raw material was extracted at room temperature successively with chloroform and with ethanol.

Substance (I) was obtained from the chloroform extract by column chromatography (sorbent: silica gel L 60/100 μ; solvents: petroleum ether and dichloroethane).

The ethanolic extract, after concentration, was left for 24 h. The precipitate that deposited was separated off and subjected to recrystallization from aqueous ethanol, giving substance (II). The mother liquor was evaporated to a dry residue, and this was subjected to acid hydrolysis with 5% sulfuric acid for 5 h. The precipitate so formed was separated off and transferred to a column filled with polyamide solvent. Elution was carried out with chloroform—ethanol mixtures containing increasing amounts of the latter. In this way, substances (III), (IV), and (V) were obtained.

Substance (I), $C_{30}H_{48}O_3$, small white acicular crystals soluble in ether, chloroform, acetone, and ethanol and insoluble in petroleum ether and water. mp 302-304°C (ethanol), $[\alpha]_D^{20}$ +78, (c 0.8; chloroform); $\lambda_{max}^{conc\ H_2SO_4}$ 310 nm. The Lieberman—Burchard and Salkowsky reactions were positive.

Substance (II), $C_6H_{14}O_6$, small white acicular crystals. mp 166-168°C (aqueous ethanol). Its hexa-O-acetate had mp 124-126°C. Substance (II) was soluble in water and ethanol, and insoluble in ether and chloroform.

N. Narimanov Azerbaidzhan State Medical Institute, Baku.

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Substance (III), $C_{15}H_{10}O_5$, small pale yellow crystals, soluble in ether, acetone, and ethanol, and insoluble in chloroform and water. mp 348-351°C (ethanol), $\lambda_{max}^{ethanol}$ 268, 336 nm. R_f 0.90 (BOW (4:1:5), system 1) and 0.60 (60% CH_3COOH, system 2).

Substance (IV), $C_{15}H_{10}O_6$, small yellow acicular crystals, soluble in acetone and ethanol and insoluble in chloroform and water. mp 329-332°C (ethanol), $\lambda_{max}^{ethanol}$ 350, 255 nm. R_f 0.82 (system 1) and 0.46 (system 2).

Substance (V), $C_{15}H_{10}O_7$, yellow crystals, soluble in ethanol and acetone and insoluble in chloroform and water. mp 304-307°C (ethanol), $\lambda_{max}^{ethanol}$ 370, 258 nm. R_f 0.70 (system 1) and 0.28 (system 2).

On the basis of their physicochemical properties, the results of chromatographic and spectral (UV and IR) analyses, and comparative determinations using authentic samples, substance (I) was identified as oleanolic acid and (II) as mannitol [1-3].

From their color reactions and bathochromic shifts with complex-forming and ionizing reagents and the results of a comparison of IR spectra, substances (III), (IV), and (V) were identified as apigenin, luteolin, and quercetin, respectively [4].

This is the first time that any of these compounds have been isolated from the leaves of *Phillyrea latifolia*.

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COMPONENTS OF *Ramalina pollinaria*

O. V. Morozova, T. D. Dargaeva, and L. I. Brutko

UDC 541.4+633.88

The ground dry thallus of the lichen *Ramalina pollinaria* (Westr.) Ach. (Krasnodarskii krai, 1981) was extracted with ethanol—chloroform (1:4) at 85°C for 3 h, and the extract was filtered and evaporated to 1/5 of its initial volume. On cooling, a substance (I) crystallized out in the form of yellow needles. After they had been separated off, the residue yielded compounds (II) and (III) by chromatography on columns of silica gel L 100/150 μ in the petroleum ether—chloroform (1:1) system.

Compound (I) — $C_{18}H_{16}O_7$, M^+ 344, mp 203-204°C (ethanol—chloroform), $[\alpha]^{20}$ +495°. UV spectrum, $\lambda_{max}^{C_2H_5OH}$ 233, 282 nm. On a Silufol chromatogram in the toluene—dioxane—glacial acetic acid (180:45:5) system, R_f 0.69. Dark in UV light before treatment with 10% sulfuric acid and heating, after which it gave a green fluorescence. NMR spectrum in $CDCl_3$: s 1.9 and s 2.2 (2 C—CH_3), s 2.63 (2 $COOCH_3$), s 5.98 (H-1), s 11.2 (H-5), s 13.25 (H-7), s 18.8 (H-2). It was identified as usninic acid.

Compound (II) — $C_{19}H_{18}O_8$, M^+ 374, mp 196°C (acetone). UV spectrum $\lambda_{max}^{C_2H_5OH}$ 255, 285 nm. With KOH and p-phenylenediamine, ethanolic solutions of the substance gave a yellow coloration, and with $FeCl_3$ a brown-red one. On a Silufol chromatogram in the toluene—dioxane—glacial acetic acid (180:45:5) system, R_f 0.76. In UV light it was dark until treated with a 10% sulfuric acid solution with heating, when it fluoresced yellow-brown, or with an ethanolic solution of p-phenylenediamine, when it fluoresced yellow. NMR spectrum in $CDCl_3$: s 2.07, s 2.54, s 3.98 (3 C—CH_3 in the 3', 6', and 6 positions, respectively), s 3.98 (—$COOCH_3$), s 6.4 (H-5), s 6.5 (H-5'). It was identified as atranorin.

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