BRIEF COMMUNICATIONS

COMPONENTS OF THE LEAVES OF *Hibiscus cannabinus*

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The leaves of kenaf of variety 1574 were extracted with chloroform (A). The total yield of fraction A was 9% of the air-dry raw material. This fraction was separated into acetone-insoluble (A_1) and acid-soluble (A_2) fractions. Fraction A_1 was exhaustively extracted with petroleum ether with heating (A_3). The insoluble part from A_1 was saponified with 15% KOH in ethanol, separated from the unsaponified matter, and hydrolyzed with 2 N HCl (A_4) [1]. When A_2 was saponified under the same conditions we obtained a total saponifiable material (A_5) and the total unsaponifiable material (A_6). Separation of the fractions obtained into individual components was performed by chromatography on columns of alumina [2].

The columns were eluted successively with petroleum ether, benzene, acetone, and methanol. After a chromatographic study, similar fractions of the eluents were combined and the yields were determined. Below we give the percentage ratios of the eluted substances to the total amount A (unsorbed substances, 1.6%):

Fraction	Petroleum ether	Benzene	Acetone	Methanol	Total
A_3	11.3	1.3	0.8	1.2	14.5
A_4	2.2	0.8	1.2	2.7	6.9
A_5	21.5	4.7	3.3	18.5	48.0
A_6	6.8	2.2	6.6	13.4	29

The petroleum, ether, and benzene eluates of A_3 yielded a number of crystalline substances which, on the basis of the results of elementary analysis, were assigned to high-molecular-weight hydrocarbons and alcohols. By means of GLC with markers we identified among these hexacosane, heptacosane, octacosane, nonacosane, triacontane, hentriacontane, dotriacontane, triatriacontane, tetratriacontane, pentacontane, hexatriacontane, heptatriacontane, octatriacontane, nonatriacontane, tetracontane, and hentetracontane.

Gas–liquid chromatography was performed on a Chrom-41 instrument under the following conditions: stationary liquid phase SE-30, length of the column 1 m, diameter 3 mm, temperature of the evaporator 350°C, temperature of the column 280°C, carrier gas nitrogen.

Substances with mp 77-78°C, 81-82°C, 84-85°C, and 87-88°C, giving acetyl derivatives with mp 62-64°C, 66-67°C, 69-70°C, and 72.5-73.5°C were identified as hexacosanol, octacosanol, triacontanol, and dotriacontanol [3], respectively. By reversed-phase chromatography [4] with markers, in fraction A_4 we identified the saturated fatty acids lignoceric, cerotic, montanic, and melissic [5] (samples of the fatty acids were provided by Kh. I. Isaev).

LITERATURE CITED

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