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POLYPHENOLIC COMPOUNDS OF THE ROOTS OF *Hibiscus cannabinus*

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The bark of the roots of kenaf of variety 1574 collected after the harvesting of the green bast was extracted with chloroform, benzene, acetone, and methanol. Polyphenols were detected in the last two extracts. The treatment of the chromatograms with the vanillin reagent [1] showed that flavans of a simpler structure had passed into the acetone and very complex ones, of the tannin type, into the methanol.

The methanolic fraction was evaporated in vacuum in a current of nitrogen to dryness and the residue was treated with dry methanol. The polyphenols were precipitated from the solution obtained with chloroform and were dried over phosphorus pentoxide. In this way proanthocyanidin (I) was obtained. On a chromatography of (I) in the butan-1-ol-acetic acid-water (40:12:28) system could be seen a diffuse band. Compound (I) decomposed at a temperature of about 200°C. The hydrolysis of (I) with 0.5 N HCl and PC of the hydrolysis products showed that from the tenth to the fortieth minute the splitting out of monomeric flavans took place, and subsequent heating led to the formation of insoluble phlobaphenes [2]. The products of acid cleavage were extracted with diethyl ether. PC and TLC on "Silufol" plates revealed two compounds (II) and (III) (BAW and chloroform-ethyl acetate-ether (7:2:1) systems).

Separation of (II) and (III) into individual components was achieved by column chromatography (with type KSK silica gel as adsorbent and ether as eluent).

Flavan (II) formed colorless needles with mp 250-252°C (decomp.) λ_{\max} 280 nm (ethanol) and was identified as (-)-epicatechin gallate [3].

Flavan (III) formed colorless crystals with mp 230-232°C (decomp.), λ_{\max} 280 nm (ethanol) and its R_f value coincided with that of (-)-epicatechin, with an authentic sample of which it gave no depression of the melting point. It has been established that the roots of kenaf contain proanthocyanidins in the formation of which (-)-epicatechin gallate and (-)-epicatechin participate.

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