

At the present time, fruit not only of vitamin-rich but also of vitamin-poor species is used to prepare the rose oil karotolin.\* In view of this, there is interest in the study of the chemical composition of the fruit of *Rosa platyacantha* Schrenk., which is widely distributed in the Alma-Ata oblast. The flesh of the fruit, which possesses a bitter-astringent taste contains about 10% of tanning substances [1]; the isolation of anthocyanin pigments has been reported [2].

We have investigated the fruit of *R. platyacantha* collected in the period of complete ripeness in the foothills of the Trans-Ili Ala-Tau and dried in the shade. Moisture content 10.8%.

The stones of the fruit were found by exhaustive extraction with diethyl ether to contain 4.5% of fatty oil. The flesh of the fruit was found by handbook methods [3] to contain about 1.3% of ascorbic acid and 11 mg-% of carotene. A qualitative chromatographic investigation of a methanolic extract showed the hydrolyzable nature of the tannin complex of the fruit.

On standing, a methanolic extract deposited a substance with  $R_f$  0.26 and 0.05 (BAW 4:1:5) and 15% acetic acid; FN-3 paper, (ascending chromatography), which was identified as ellagic acid on the basis of the decomposition temperature (360°C), qualitative reactions, IR spectrum, and its position on the chromatogram. The methanolic extract was concentrated to dryness and the residue was treated with petroleum ether to eliminate lipophilic substances, and the extracted residue was dissolved in water and deposited on a column of Sephadex LH-20. Elution with water yielded a substance having  $R_f$  0.16 and 0.82 in the form of white crystals with mp 220-222°C,  $[\alpha]_D -23.5^\circ$  (c 0.1; ethanol).

The substance formed a blue coloration with a 1% aqueous solution of ferric ammonium alum, did not give positive reactions for sugars, and was hydrolyzed to gallic acid and glucose. Acetylation with acetic anhydride in pyridine yielded a white crystalline substance with mp 125-127°C,  $[\alpha]_D -23.5^\circ$  (c 0.1; ethanol). On the basis of the results obtained, the substance was identified as  $\beta$ -glucogallin [4].

When the total material was eluted from the Sephadex with aqueous methanol, gallic acid was obtained, which was identified on the basis of the absence of a depression of the melting point of a mixture with an authentic sample.

Aqueous acetone eluted from the Sephadex yielded a tannin substance with  $R_f$  0.02 and 0.25 (under the same conditions). From the products of complete acid hydrolysis of this substance we isolated and identified glucose and gallic, ellagic, and dehydrogallic acids. On aqueous hydrolysis at 100°C, the gallic and ellagic acids were split out. The determination of the structure of the tannin substance is continuing.

## LITERATURE CITED

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\*As in Russian Original - Publisher.

S. M. Kirov Kazakh State University, Alma-Ata, Alma-Ata Medical Institute. Translated from Khimiya Prirodnikh Soedinenii, No. 3, pp. 420-421, May-June, 1979. Original article submitted February 23, 1979.