The decrease in the acid number of the soluble and then of the hydrolyzed fraction of amber (II) in comparison with diabietinic acid the theoretical acid number of which is 185 by about 20% shows the presence of an acidic substance in the resin (II) (~80%).

The presence of an absorption band at 1730 cm^{-1} in the IR spectrum of the resin (I) and its disappearance after hydrolysis with the simultaneous appearance of a band at 1030 cm^{-1} in resin (II) shows the existence of ester groups in resin (I). This is also indicated by the change in the acid number during the hydrolysis of the soluble fraction. The molecular weight of the resin (I) (700) suggests the presence of a second component of the soluble amber in the form of a low-molecular-weight polyester based on diabietinic acid. The numbers of acid and ester groups in the soluble amber (I) was determined from the ratio of the acid numbers of the soluble (I) and the hydrolyzed (II) fractions (see Table 1) (2:1).

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TRITERPENE AND STEROID GLYCOSIDES OF Rosa gallica

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Free triterpenoids and sterols have been isolated from the flowers of Rosa gallica previously [1-3].

From rose flowers by essential-oil extraction with aqueous ethanol we obtained three crystalline glycosides called in order of increasing polarity gallicosides A, B, and C with mp 280-282°C (decomp.), $[\alpha]_D^{20} + 12.1°$ (c, 1.6; water); mp 250-254°C (decomp.), $[\alpha]_D^{20} - 10.4°$ (c, 2.0; water); and mp 209-211° (decomp.), $[\alpha]_D^{20} + 15.2°$ (c 0.8; water), respectively. They were separated preparatively on silica gel in the ethyl acetate – ethanol – water (7:3:3) system.

To determine the nature of the aglycones and the monosaccharide compositions of the glycosides they were subjected to acid hydrolysis (5% sulfuric acid, 100°C, 5 h). The aglycones of gallicosides A and B that were isolated were identified as oleanolic acid from their chromatographic mobilities in the chloroform-methanol (9:1) system and also by the melting points of the aglycones themselves and their acetates. The aglycone of gallicoside C was identified by its schromatographic behavior, melting point, and absence of a depression of a mixture with an authentic sample as β -sitosterol. By paper chromatography and gas-liquid chromatography we found glucose in the carbohydrate fraction of gallicoside A, glucose and ribose, gallicoside B, and in galactose and glucose in gallicoside C. The results of the alkaline saponification of glycosides A and B show the absence of a carbohydrate chain at the carboxy group of the oleanolic acid.

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