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#### CHEMICAL COMPOSITION OF A PHENOL-POLYSACCHARIDE PREPARATION OF PROPOLIS

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Propolis is a natural product with a complex chemical composition elaborated by bees. The biological activity of this product has permitted its wide use in human and veterinary medicine [1].

The isolation of biologically active fractions from propolis and their detailed chemical analysis are necessary for answering the question of the dependence of the therapeutic activity of this product on its composition and the creation of medicinal forms with a directed action from it.

We have studied a phenol-polysaccharide preparation of propolis obtained from crude propolis after it had been freed from waxes. Qualitative reactions showed the presence of phenolic compounds and polysaccharides in the preparation. We have examined its macro- and microelement composition.

Individual substances were isolated by preparative paper chromatography in 2% acetic acid solution with elution by 95% ethanol. On the basis of qualitative reactions, UV spectroscopy, and  $R_f$  values in various solvent systems and also of a direct comparison with authentic samples [2, 4], seven substances were identified in the preparation: five hydroxycinnamic acid derivatives (caffeic, ferulic, chlorogenic, enochlorogenic, and coumaric acids and two hydroxycoumarin derivatives (esculetin and scopoletin).

The total amount of phenolic compounds in the phenol-polysaccharide preparation of propolis was determined spectrophotometrically in a cell with a layer thickness of 10 nm at a wavelength of 290 nm [5], since the UV spectrum of an alcoholic solution of the spectrum had an absorption maximum in this region. It amounted to 30-40%.

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