PHYTOCHEMICAL INVESTIGATION OF Agrimonia eupatoria

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We have studied the epigeal part of common agrimony collected in the flowering phase. The tannin substances consisted solely of condensed tannides. Their amount, determined by the GF-X method [1] was 8.19%, which is almost twice that given in the literature [2].

The polysaccharides were extracted with hot water, and the extracts were combined and evaporated to small volume and were then precipitated with ethanol (1:4). Yield 19.5%.

The presence of two substances of coumarin and five substances of flavonoid nature was established chromatographically. In an acid hydrolysate, luteolin, apigenin, and quercetin were found as flavonoid aglycones. Column chromatography on Kapron [nylon-6] using water and mixtures of water and ethanol with increasing concentrations of ethanol as eluents yielded two individual flavonoid glycosides (I and II).

According to the results of qualitative reactions, of acid and enzymative hydrolyses, and of UV spectroscopy with the addition of diagnostic agents [3], and also its chromatographic behavior, substance (I) was characterized as luteolin 7-O- β -D-glucoside, and substance (II) as apigenin 7-O- β -D-glucoside.

It is known that luteolin 7-glucoside possesses a cholagogic action [4] and is not inferior in its activity to the preparation "Flamin." This apparently fully explains and justifies the wide use of the herb agrimony in folk medicine [5, 6] for the treatment of diseases of the liver.

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