FLAVONOIDS FROM *Bupleurum exaltatum*

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The flavonoid composition of representatives of the genus *Bupleurum* depends on the conditions of their growth [1]. We have investigated the flavonoid composition of individual parts of *Bupleurum exaltatum* M. B., family Apiaceae L. (*Umbelliferae*) collected in the environs of the town of Gori, Georgian SSR in 1979. The qualitative flavonoid compositions of the leaves, stems, and flowers proved to be identical but the amount of flavonoids in the flowers was different from the others.

Flavonoids were extracted from the epigeal part of *Bupleurum exaltatum* with 80% ethanol, the extracts were evaporated, and the aqueous residue was purified with chloroform. On standing, the aqueous residue deposited yellow acicular crystals of substance (I) with mp 182-184°C, $[\alpha]_D^{20}$ −37.6° (c 0.1; ethanol). The enzymes of rhamnodiastase split substance (I) into the aglycone — quercetin — and rutinose, and acids split it into quercetin, D-glucose, and L-rhamnose. On a paper chromatogram in various systems of solvents the glycoside appeared at the level of rutin [2, 3]. A mixture with an authentic sample of rutin showed no depression of the melting point. The IR and NMR spectra of the flavonoid under investigation were identical with those of rutin [4, 5]. The yield from the raw material was 0.5%.

The mother solution was extracted with ethyl acetate. The ethyl acetate extract was evaporated and the residue, giving one flavonoid spot, was purified on a column of polyamide. This gave substance (II), which was identified as isorhamnetin 3-glucoside [6].

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