

OP4. COMPONENTS OF PLANTS *HAPLOPHYLLUM GRIFFITHIANUM* OF THE RUTACEAE FAMILY

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Chemical investigation on aerial parts of *H. griffithianum* collected from two growing places of Uzbekistan, led to the isolation of a new quinolin-2-one type alkaloid, griffinine, as well as 12 quinoline alkaloids, identified to be dubinine, dubinidine, dictamnine, skimmianine, evoxine, gerphytine, gerphytinine, dubamine, N-methylhaplofoline, flindersine, folimine, griffithine, wherein, 4 compounds, dictamnine, skimmianine, folimine, and griffinine were obtained from the roots extract of this material.

The carbohydrate complex of aerial parts of *Haplophyllum griffithianum* plants has been studied. As a result of the study, the presence of alcohol-soluble sugars, water-soluble polysaccharides, pectin substances and hemicelluloses were established.

As a result of the study, it was found that alcohol-soluble sugars of the plant *Haplophyllum griffithianum*, represented by hexose - glucose, ketosaccharides fructose and sucrose.

The yield of water-soluble polysaccharides (WSPS) was 6.5%. The isolated polysaccharides are beige amorphous powders, readily soluble in water, giving color with an iodine solution, which indicates the presence of a starch-type glucan in the studied raw material. In the monosaccharide composition of water-soluble polysaccharides were identified: galactose and arabinose.

The yield of pectin substances (PV) was 3.1%. HP is a white amorphous powder, highly soluble in water. A solution of HP gives with iodine a barely noticeable blue color that quickly disappears. It is shown that the monosaccharide composition of pectin substances is represented by galacturonic acid, galactose, arabinose and, in small amounts, xylose.

The HMC yield was 4.5%. Hemicelluloses are light brown amorphous powder, insoluble in water, readily soluble in dilute alkalis. As a result of chromatographic analysis, the presence of glucuronic acid, galactose, arabinose, xylose, in smaller amounts of glucose, was found in the composition of hemicelluloses.

HP and HMC are also characterized by the presence of arabinose and xylose. This is characteristic of HMC, which are based on xylans.

Thus, the presence of VRPS, PV, HMC in the plant *Haplophyllum griffithianum* was established. It is shown that these biopolymers predominate in the aerial part.

Keywords: Rutaceae; isolation; pectin