

In a phytochemical investigation of *Petasites georgicus* Manden, family Compositae, we have found flavonoid substances in its epigeal and hypogeal parts. The epigeal part contained 0.50% (gravimetric method) and the hypogeal part 0.35%.

By ascending paper chromatography we found three substances of flavonoid nature in the roots. By chromatography on a column of polyamide sorbent, from the eluate (80% ethanol) we isolated substance (I), present in predominating amount. Color reactions in paper chromatography [1] and Bryant's cyanidin reaction [2] showed its glycosidic nature and the presence of free hydroxy groups at C₃, C₄, C₅, and C₇. In the products of acid hydrolysis (5% H₂SO₄) we found an aglycone and a carbohydrate residue identified by a paper-chromatographic comparison with an authentic sample of L-rhamnose. The composition and melting point of the aglycone (309-312°C) corresponded to quercetin.

By its composition, melting point (184-187°C) and IR spectrum glycoside (I) was characterized as quercitrin.

In the mixture of flavonoids from the epigeal part, four compounds were detected by chromatographic methods. The two substances (II and III) forming the main components of the mixture were separated preparatively and characterized. It was found that (II) was a glycoside and (III) an aglycone.

From the elementary compositions physicochemical constants (melting points, $[\alpha]_D$), and spectral characteristics, the aglycone was identified as quercetin and the glycoside as rutin [3, 4]. This is the first time that these substances have been obtained from *Petasites georgicus*.

LITERATURE CITED

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