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FLAVONOIDS OF THE EPIGEAL PARTS OF

Scutellaria oreophila

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The epigeal part of <u>Scutallaria oreophila</u> Grosch., family Labiatae, was collected in the flowering phase (July 24, 1973) on the sloped of the mountains close to the Kedabek region of AzerbSSR.

Paper chromatography (two-dimensional) in the butan-1-ol-acetic acid-water (4:1:2) and 15% acetic acid systems before and after examination in filtered UV light showed the presence in ethanolic extracts of the epigeal parts of the plants of ten substances of flavonoid nature. A saturated methanolic solution of zir-conyl nitrate and ammonia vapors were used as the chromogenic agents.

To isolate the flavonoids, the dried and comminuted material was extracted with 70% ethanol. The ethanolic extracts were concentrated under vacuum to an aqueous residue. The chlorophyll that had deposited was separated off, and the aqueous residue was treated first with chloroform and then, in order to decompose the complex salts of the flavonoids, it was diluted with 30% acetic acid and treated with ethyl acetate.

The fractions obtained were chromatographed from paper in the solvent systems mentioned above. It was found that the chloroform fraction contained three flavonoids of aglycone nature, and the ethyl acetate fraction six different flavonoid compounds. The chloroform fractions were concentrated and were separated on a column of polyamide, chloroform being used for elution. Substances (I) and (II) were isolated.

The ethyl acetate fractions were also evaporated and the resides were treated with small amounts of water and separated on a column of Kapron sorbent. On elution with water and ethanols of different strengths (10, 30, 50, and 70%), three substances (III-V) were isolated.

The substances isolated were investigated, and it was found that substance (I) was baicalein, (II) chrysin, (III) baicalin, (IV) luteolin, and (V) cynaroside.

The flavonoids obtained were identified on the basis of their physicochemical properties, the products of their hydrolysis, IR and UV spectroscopy, and paper chromatography with authentic samples. In addition to the compounds identified, other flavonoids were detected, the study of which is continuing.

The flavonoids of Scutellaria oreophila have not been investigated previously.

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