

Plants of the family *Caryophyllaceae* have been investigated for the presence of flavonoids: *Lychnis chalcedonica*, *L. fulgens*, *L. wilfordii*, *Coronaria soriacea*, *Silene tatarica*, and *Telefium orientale*. Each of these species named contains several flavonoid compounds. The flavonoids were extracted from the dried and comminuted epigeal part of the plants with 20% ethanol, the extract was evaporated to dryness, the residue was dissolved in ethanol with heating, and the saponins were precipitated from the ethanolic solution with acetone. The precipitate was separated off, the solution of the flavonoids was evaporated to dryness, and the dry residue was dissolved in water and separated on a column containing Kapron and "hydro-cellulose." The flavonoids present in the plants in very small amounts were isolated by preparative paper chromatography.

The compounds obtained were pure, as was confirmed by their chromatography in several systems of solvents [15% acetic acid, BAW (4:1:2), *Forestal's system*, etc.]. On the chromatograms before the treatment with chromogenic reagents the compounds fluoresced dark brown and after treatment the spots of the flavonoids acquired a yellow-green or orange-yellow fluorescence (solution of zirconium nitrate), or this color was enhanced with the appearance of detail in the spots (ammonia vapor). In Bryant's cyanidin reaction, a pink coloration not passing into the octanol layer was formed. This gave a preliminary characterization of these compounds as flavone glycosides. The flavone nature of the substances was also shown by the UV spectra of their methanolic solutions, having absorption maxima in the 270-275 and 325-330 nm regions. Some of the compounds had a "shoulder" in the 255-260 nm region in addition to the main maximum at 270-275 nm.

On acid hydrolysis with 5% hydrochloric acid, the majority of the compounds isolated underwent isomerization with the formation of an equilibrium pair of glycosides, but without splitting off of the sugars, which is characteristic for C-monoglycosides [1]. Flavonoids LC-1, CC-1, and ST-1, isolated from *L. chalcedonica*, *Coronaria coriacea*, and *Silene tatarica*, respectively, formed four spots under this treatment, which is characteristic of C-diglycosides [2]. A comparison of these compounds with the viceinin isolated previously from *Silene conica* [2] showed their complete identity. Acid hydrolysis by Kiliani's method [3] of the C-monoglycosides isolated from all the plants led to apigenin and luteolin as the aglycones, the luteolin C-monoglycosides orientin and isoorientin being present in *L. wilfordii*, *L. fulgens*, and *T. orientale* together with vitexin and isovitexin, while *L. chalcedonica*, *Coronaria coriacea*, and *Silene tatarica*, contained apogenin C-monoglycoside. All the plants contained more glycosylated derivatives than the C-mono- and C-diglycosides mentioned above, and also the 8- α , 6- α , and 6- β isomers of C-monoglycosides. The study of plants of the genera *Lychnis*, *Coronaria*, *Silene*, and *Telefium* is continuing.

LITERATURE CITED

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