

TRITERPENE GLYCOSIDES OF *Fatsia japonica* CULTIVATED IN GEORGIA

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Continuing an investigation of the triterpene glycosides of plants of the family *Araliaceae* found on the territory of the Georgian SSR [1], we have begun the study of the saponin composition of the evergreen decorative plant *Fatsia japonica* (Thunb) Decne et Planch. (Japan fatsia) [2].

The air-dry leaves of the plant cultivated in the environs of Batumi were comminuted and were extracted exhaustively first with chloroform and then with boiling methanol. The methanolic extracts were concentrated, and the dry residue was dissolved in chloroform-methanol-water (26:14:3) and purified by rough partition chromatography on Al_2O_3 in a short wide column. The combined saponins were separated from the free mono- and oligosaccharides on Sephadex G-25.

The total yield of the combined saponins purified in this way was about 5% on the air-dry leaves. At least seven glycosides of triterpene nature were found in them which we have called fatsiosides A-G.

By partition chromatography on a column of silica gel, an acid hydrolyzate of the combined saponins yielded two individual crystalline aglycones: with mp 304-306°C, $[\alpha]_D^{20} + 78.2^\circ$ (c 1.2; ethanol) and with mp 326-328°C, $[\alpha]_D^{20} + 82.2^\circ$ (c 1.1; ethanol). They were identified as oleanolic acid and hederagenin, respectively. The nature of the aglycones was also confirmed by the properties of their acetyl derivatives.

D-Glucose, L-arabinose, and L-rhamnose were found in the hydrolyzate after the separation of the aglycones by neutralization with $PbCO_3$ and paper chromatography in various solvent systems.

LITERATURE CITED

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