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THE ISOLATION OF OLITORISIDE FROM THE SEEDS OF CORCHORUS OLITORIUS

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The cardiac glycoside olitoriside, which is used in medicine [1], is isolated from the seeds of Corchorus olitorius [2]. We have developed a new method for the isolation of olitoriside. The seeds of Corchorus olitorius, after cominution and defatting by extraction with gasoline, were extracted by steeping in 96% ethanol. The extract was concentrated and was treated twice with acetone to precipitate the sugars.

The acetonc solution was concentrated and was treated with ether to eliminate the residues of fatty and resinous substances. The extractive substances insoluble in ether were precipitated in the form of a viscous dark mass which was separated off and washed with ether.

The viscous mass was dissolved in water and common salt was added, and, to eliminate the monosides and inert substances, the solution was washed with chloroform several times. Then the olitoriside was exhaustively extracted from the aqueous solution with small portions of a mixture of chloroform and isopropanol (1:1 by volume). The chloroform-isopropanol extract was concentrated to small volume and filtered through a layer of alumina, and then an equal volume of water was added and the mixture was left in a thermostatted vessel at 36-37° C. As the isopropanol evaporated off, crystals deposited; these were separated off and washed with water.

The crystals obtained were dissolved in boiling acetone, and on cooling the olitoriside deposited.

The crystals of olitoriside that had deposited were recrystallized from aqueous ethanol (1:1 by volume). The yield of olitoriside was 0.13% of the weight of the raw material.

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APIGENIN AND ITS GLYCOSIDES FROM GRATIOLA OFFICINALIS

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By one- and two dimensional paper chromatography we have found in the herb drug hedgehyssop, collected in the phase of mass flowering, about ten substances of flavonoid nature. The flavonoids were separated on Kapron, and the individual compounds GF-1, GF-2, GF-3, and GF-4 were isolated.

Apigenin (GF-1), $C_{15}H_{10}O_5$, has mp 346-348° C (aqueous methanol), R_f in 15% acetic acid (system 1) 0.04, and in butan-1-ol-acetic acid-water (4:1:2) (system 2) 0.92; λ_{max} in ethanol 336, 270 m μ (log ϵ 4.40, 4.38); λ_{max}