

## D-MANNITOL FROM Peucedanum AND Delphinium

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In a study of the phenolic compounds of the roots of Peucedanum calcareum and the epigeal parts of some representatives of the genus Delphinium growing in Georgia, we found a polyhydric sugar alcohol in them.

To isolate this compound, the air-dry comminuted raw material was extracted with hot methanol. On standing, the concentrated extract deposited a precipitate, which was separated off and recrystallized from methanol. This gave white acicular crystals readily soluble in water. The substance obtained from different species of plants had mp 165-166°C, 162-164°C, and 163-165°C. Acetylation with acetic anhydride in pyridine gave a crystalline hexacetate with mp 125-126°C and 125-127°C [1, 2].

Mixtures of the substance isolated and its acetate with authentic samples of D-mannitol and mannitol hexacetate caused no depression of the melting points, and on paper chromatograms in various systems of solvents [3] they each gave a single spot. The IR spectrum was identical with that for D-mannitol [2]. D-Mannitol was isolated from Peucedanum calcareum (7%), Delphinium flexiosum, D. elisabethae, D. tamarae, and D. dzawachischwili. This compound was not detected in D. freynii and D. smalhauseni.

From the mother solution remaining after the isolation of D-mannitol from Peucedanum calcareum we obtained white crystals with mp 185-186°C identified as sucrose.

### LITERATURE CITED

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