

D-MANNITOL FROM ERYNGIUM COERULEUM AND E. MACROCALYX

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We have studied the leaves, flowers, and roots of Eryngium coeruleum M. B. and E. macrocalyx Schrenk., collected in the Tashkent region in the flowering stage. The raw material, freed from resins with chloroform, was treated with boiling ethanol. At room temperature, the concentrated alcoholic extracts (from the flowers and leaves) deposited crystals with mp 165–167° C (from ethanol) having the composition $C_6H_{14}O_6$. It was impossible to obtain crystals from the roots by the above-mentioned method.

The IR spectra of the substance and of D-mannitol were identical. There was no depression of the melting point in a mixture of a sample of the substance under investigation with D-mannitol.

Esterification with acetic anhydride in pyridine gave an acetyl derivative with the composition $C_{18}H_{26}O_{12}$ (from ethanol) which melted at 124–125° C and gave no depression in admixture with D-mannitol hexaacetate. The IR spectrum of the acetyl derivative of the substance was identical with that of D-mannitol hexaacetate.

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