ARBUTIN FROM Serratula sogdiana

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Continuing an investigation of <u>Serratula sogdiana</u> Bge. (Compositae) for its content of phytoecdysones [1], from a concentrated methanolic extract of the leaves of this plant we have isolated a crystalline compound (I), $C_{12}H_{16}O_7$, mp 200-202°C (water) (after drying). [α]_D=64.0° (c 1.93; water); 3400-3200 cm⁻¹ (OH); 1235, 1085 cm⁻¹ (=C-O-C), 1610, 1595-1515, 840, 815 (benzene ring); mol. wt. 272 (mass spectrometry). The yield on the air-dry raw material was 0.6%.

The acetylation of compound (I) with acetic anhydride in pyridine led to a pentaacetate (II), $C_{22}H_{26}O_{12}$, with mp 147-149°C (acetone), $[\alpha]_D$ =26.7° (c 1.19; acetone).

The hydrolysis of substance (I) with 5% sulfuric acid gave a sugar which was identified by the GLC method and thin-layer chromatography in silica gel as D-glucose. The aglycone was hydroquinone, mp 171°C.

The properties of compound (I) and of its pentaacetate (II) given above enable the glycoside isolated to be identified as arbutin [2]. Arbutin has been obtained previously from other species of <u>Serratula</u> [3].

LITERATURE CITED

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