## PHENOLIC COMPOUNDS FROM Sedum purpureum

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We have studied the epigeal part and roots of <u>Sedum purpureum</u> (purple stonecrop), family Crassulaceae, collected in various vegetation phases in the environs of the village of Kurikovka, Dnepropetrovsk oblast.

Qualitative reactions [1, 2] showed the presence in this plant of tanning substances, simple phenols, phenolcarboxylic acids, flavonoids, coumarins, organic acids, sterols, and sugars, which accumulate in it to the maximum extent in the vegetation period.

By paper chromatography, in the epigeal part of the purple stonecrop we found not less than 22 substances of phenolic nature, and by preparative chromatography on Kapron from an aqueous ethanolic extract of the same part of the plant we isolated the total flavonoids (0.6%). These were rechromatographed on a column of alumina. On elution with water we isolated a substance with the composition  $C_{12}H_{16}O_7$ , mp 151-152°C (aqueous acetone, 1:1)  $[\alpha]_D^{20}$  -59°,  $R_f$  0.92 in the ethyl acetate-formic acid-water (10:2:3) system and 0.74 in 15% acetic acid.

From the products of acid (2% sulfuric acid) and enzymatic (rhamnodiastase) hydrolysis of this substance we isolated D-glucose and an aglycone. The aglycone had the composition  $C_6H_6O_2$ , mp 170-172°C; its acetyl derivative  $C_{10}H_{10}O_4$  had mp 123-125°C and its methyl derivative  $C_8H_{10}O_2$  had mp 58-60°C, i.e., the aglycone was identical with hydroquinone [3].

The carbohydrate component (D-glucose) is present in the pyranose form and is bound to the hydroquinone by a  $\beta$ -linkage, and is shown by absorption bands in the IR spectrum at 790, 900, and 920 cm<sup>-1</sup>.

Thus, from the results of physicochemical analysis and the absence of a depression of the melting point of a mixture with an authentic sample, the compound isolated was identified as hydroquinone O- $\beta$ - $\Gamma$ -glucopyranoside (arbutin).

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