separated by chromatography on fine-pored Kapron powder from methanolic solution and were purified by repeated recrystallization from 70% methanol.

Flavonol 1 had mp 279°–280° C and composition $C_{15}H_{10}O_6$, and flavonol 2 had mp 312°–314° C and composition $C_{15}H_{10}O_7$. When flavonol 1 was heated with 50% KOH at 170° C for 20 min, phloroglucinol and p-hydroxybenzoic acid were formed, while flavonol 2 gave phloroglucinol and protocatechuic acid. The products of alkaline degradation were identified by comparison with reference samples on paper chromatography in various solvent systems. The reduction with magnesium in concentrated hydrochloric acid of flavonol 1 gave pelargonidin, and that of flavonol 2 gave cyanidin. The anthocyanidins were identified by comparison with reference samples on chromatograms and by measuring their absorption spectra. The positions of the hydroxy groups in the flavonols was confirmed by measuring their absorption spectra with complex-forming and ionizing additives [3–5].

On the basis of all the results obtained, flavonol 1 was identified as kaempferol and flavonol 2 as quercetin. The amounts of the flavonols were determined by measuring the intensity of absorption of light by the spots of the flavonols directly on the chromatograms after their treatment with aluminum chloride at $\lambda = 430$ mμ. Found: kaempferol 0.1%, quercetin 0.006% of the weight of absolutely dry bark.

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13 December 1966

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UDC 615.32:581.19

A STEROID SAPOGENIN FROM RUSCUS HYRCANUS

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Khimiya Prirodnykh Soedinenii, Vol. 3, No. 3, pp. 216–217, 1967

We have established the presence of steroid compounds in all the organs of Ruscus hyrcanus. It has been found that the sapogenins accumulate mainly in the hypogeal parts [1, 2]. From the roots and rhizomes collected in July 1965 in the region of the town of Lenkoran we have isolated by adsorption column chromatography on alumina and other methods [2–5] a sapogenin of composition $C_{27}H_{12}O_4$ with mp 202°–203° C $[\alpha]_D^{20}$ –117° (c 0.53; chloroform); diacetate, mp 193°–194° C, $[\alpha]_D^{20}$ –81.5° (c 1.03; chloroform).

By paper chromatography, determination of IR spectra, and mixed melting points we have shown that the substance that we have isolated is ruscogenin [6].

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15 September 1966

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