

RHAMNOCITRIN - A NEW COMPONENT OF *Nigella arvensis*

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We have reported previously that from a hydrolyzate of an extract of the epigeal part of *Nigella arvensis* L. three substances of flavonoid nature were isolated, two of which were identified as kaempferol and quercetin [1].

The present paper gives the results of a chemical study of substance 3. Column chromatography on Kapron using 60% acetic acid as eluent gave crystals with mp 220-221°C, $\lambda_{\text{max}}^{\text{CH}_3\text{OH}}$ 265, 350 nm, R_f 0.55 (15% CH_3COOH) and 0.93 [benzene-ethyl acetate-acetic acid-formamide (70:30:2:1)].

By qualitative reactions and UV spectroscopy, three hydroxy groups were detected in positions 3, 4', and 5. The yellow fluorescence of the flavonol and the features of the UV spectrum show that the substance contains a substituent in position 7. The IR spectrum shows, in addition to the usual absorption bands for flavonoids, bands at 2920 and 2885 cm^{-1} which show the presence of a methyl group [2]. The products of demethylation with hydriodic acid performed by the usual method [3] contained kaempferol. Consequently, substance 3 is 3,4',5-trihydroxy-7-methoxyflavone or rhamnocitrin.

This is the first time that rhamnocitrin has been isolated from representatives of the family Ranunculaceae.

LITERATURE CITED

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