ISORHAMNETIN 3-GALACTOSIDE

FROM Onobrychis Angustifolia

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We have previously reported the isolation of hyperin and rutin [1] from the leaves of Onobrychis angustifolia Chinth. A third flavonoid which we have obtained from this plant in the individual crystalline state has the composition $C_{22}H_{22}O_{12}$, mp 211-212°C, $[\alpha]_D^{26}$ -120° (c 0.1; ethanol). On treatment with alkali, the substance fluoresced dark yellow in UV light, and after hydrolysis it fluoresced bright yellow. UV spectrum: λC_2H_5OH 254, 355 nm; λ AlCl₃ 269, 402 nm. λ Max

The acid hydrolysis of the flavonoid with 2% sulfuric acid formed an aglycone with mp 294-295°C.

The IR and UV spectra of the aglycone corresponded to those of isorhamnetin [2]. The sugar component of the flavonoid was identified as galactose.

The facts given above give grounds for assuming that the substance studied is isorhamnetin 3-galactoside, or cacticin [3].

This is the first time that this glycoside has been isolated from the genus Onobrychis.

LITERATURE CITED

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