When luteanine was heated with 10% hydrochloric acid in the water bath for six hours, a crystalline substance (III) with mp 106-108°C (chloroform) was obtained. Its mass spectrum was: 123 (M^+), 106, 78, and 30 m/e. The physicochemical properties of (III) coincided with those of o-hydroxybenzylamine [3].

Thus, luteanine is 2-oxodihydro-1,3-benzoxazine [4], and this is the first time that it has been detected in plants.

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TRIACETYLGLYCOPERIN – A NEW ALKALOID FROM Haplophyllum perforatum

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Continuing a study of the combined alkaloids of a methanolic extract of Haplophyllum perforatum [1], we have isolated a new base (I) with the composition $C_{25}H_{27}NO_{11}$, mp 181-182°C (benzene–petroleum ether), $[\alpha]_D$ –91° (c 0.4; ethanol), readily soluble in chloroform, acetone, and dilute acids, less readily in ether and petroleum ether, and insoluble in water and alkaloids. The individuality of the substance was checked on TLC in several solvent systems.

The IR spectrum of (I) has the absorption bands typical for an ester group (1750 cm^{-1}) and a furan ring (3130 and 3155 cm^{-1}). The UV spectrum of the base [λ_{max} 248, 314, 323, 336 nm (log ε 4.94, 3.91, 3.93, 3.83)] is characteristic for furanoquinoline alkaloids with alkoxy substituents in positions 7 and 8 [2].

The NMR spectrum of (I) (τ scale, $CDCl_3$, 0 – HMDS, JNM-4H-100) shows doublets at 2.14 and 2.88 ppm (J = 9.5 Hz), 1 H each (ortho aromatic protons); doublets at 2.54 and 3.09 ppm (J = 3 Hz), 1 H each (protons of a furan ring); singlets at 5.85 and 6.00 ppm, 3 H each (methoxy groups); a multiplet at 4.51 ppm (3 H), a triplet at 4.95 ppm (1 H, J = 10 Hz), a broadened multiplet in the 5.60-6.20 ppm region (1 H), singlets at 7.95, 8.08, and 8.12 ppm, 3 H each (protons of an acetoxy group), and a doublet at 8.95 ppm (3 H, J = 6.5 Hz, $CH-CH_3$ group). The facts given, and also the mass spectrum of the base [m/e (%): 517 (M^+ 5), 273 (41), 245 (93), 227 (52), 171 (30), 153 (100), 111 (80)] are close to those given in the literature for triacetylglycoperin [3]. A direct comparison of the alkaloid isolated with a sample of triacetylglycoperin prepared from glycoperin showed that the substances were identical. The magnitude and sign of the rotation of the base and of triacetylglycoperin also coincided and, therefore, (I) has the structure established for triacetylglycoperin [4].

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