

A culture of the tissue of *R. serpentina* Benth. (strain A of stem origin) the amount of total alkaloids in which is 1.6–2.5% can serve as an industrial raw material for pharmacologically valuable alkaloids [1]. Its chemical composition has been little studied but there is information on the isolation of ajmaline and perakine [2].

From the moderately basic fraction (pH 6.0) of the combined alkaloids obtained by extraction of the comminuted biomass with dichloroethane followed by evaporation and purification with a 5% aqueous solution of phosphoric acid, a base has been isolated with the composition $C_{21}H_{22}N_2O_3$; mp 207°C, $[\alpha]_D^{20} -76^\circ$ (c 1.0; pyridine); UV spectrum, $\lambda_{max}^{C_2H_5OH}$: 219, 259 nm (log ϵ 4.37, 3.74); IR spectrum, λ_{max}^{KBr} : 1740 cm^{-1} (C=O), 3600 cm^{-1} (OH). The PMR spectrum (taken in $CDCl_3$, δ scale) contains the signals of four aromatic protons at 7.12–7.65 ppm (multiplet), of the methyls of an acetyl group at 2.15 ppm (3 H, singlet) and of a =C-CH₃ group at 168 ppm (3 H, doublet, J = 6 Hz). The mass spectrum (M^+ 350) confirms the composition of the molecule.

By comparison with literature information, the base has been identified as vomilenine [3, 4].

Vomilenine has not been detected in the intact plant *R. serpentina* Benth. and it has been found only in *R. vomitoria* Afz. [5]. In the biomass of a culture of the tissue of *R. serpentina* Benth., together with ajmaline, it is the main alkaloid and makes up 40–50% of their combined amount.

According to the literature [4], vomilenine is unstable and may be converted into perakine in acid media. We have performed the isomerization of the alkaloid isolated by boiling it in glacial acetic acid and obtained a base [4] identified from its melting points and spectral characteristics as perakine [6].

The results obtained permit the assumption that vomilenine is a native alkaloid of a culture of the tissue of *R. serpentina* Benth. and the perakine isolated from it previously is an artifact.

LITERATURE CITED

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