ALKALOIDS OF Leptorhabdos parviflora

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Continuing a study of the combined alkaloids of Leptorhabdos parviflora [1], from a chloroform eluate we have isolated a new liquid base with the composition $C_9H_{11}ON$, giving a picrate with mp 136-137°C (water), M^+ 149; R_f 0.55 [TLC on silica gel in the benzene-methanol (4:1) system]. Optically inactive. The UV spectrum[λ_{max}^{EtOH} 262, 267 nm (log ϵ 3.36, 3.34] is characteristic for alkaloids of the pyridine type [2-3].

The IR spectrum shows the presence of a hydroxy group, 3400-3200 cm⁻¹, and of an aromatic nucleus, 1610, 1580 cm⁻¹.

In the NMR spectrum of the base (JNM-C-60 HL, 60 MHz, δ scale) a one-proton singlet at 7.88 ppm and two one-proton doublets at 7.48 and 6.90 ppm (J=4.0 Hz) corresponding to three aromatic protons present in the α -, β '-, and α '-positions to a nitrogen atom of a pyridine ring can be clearly seen. A one-proton signal at 5.54 ppm is from a hydroxy group. A three-proton doublet at 1.04 ppm (J=6.0 Hz) relates to the protons of a methyl group, and a two-proton multiplet at 1.84 ppm to two methylene protons. Two one-proton multiplets at 4.88 and 3.14 ppm correspond to two methine protons.

The mass spectrum of the base has peaks of ions with m/e 149 (M^+), 132, 131, 118, 106, 104, 79, 77, 65, and 63.

On the basis of the facts presented, it may be concluded that the new base is a racemate of leptorhabine [1].

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