

A base (I) has been isolated from the epigeal organs of *Vinca major* L. cultivated in an experimental field of medicinal plants belonging to the I. G. Kutateladze Institute of Pharmacology of the Academy of Sciences of the Georgian SSR; it has proved to be new and we have called it vincamajinine.

The combined nonphenolic alkaloids obtained by the usual method [1] were separated according to basicity with citrate-phosphate buffers. When the buffer with pH 3 was subjected to column separation on alumina (1:30, Brockmann activity grade II) with elution by chloroform-methanol (99:1), fractions 68-72 yielded base (I) with the composition $C_{22}H_{26}N_2O_3$, mp 274-275°C (methanol). UV spectrum, $\lambda_{\max}^{\text{MeOH}}$, nm; 242, 290 (log ϵ 4.48, 4.14). IR spectrum, cm^{-1} ; 3050-3200 (-OH); 1745, 1250 (-COOCH₃); 770 cm^{-1} (disubstituted benzene ring). PMR spectrum: -COOCH₃, δ = 3.69 ppm (s); >NCH₃, δ = 2.64 ppm (s); C₁₉H, δ = 5.31 ppm (q); C₁₈CH₃, δ = 1.62 ppm (d × t). Mass spectrum: M⁺ 366-82.6%; m/z 222-44.5%; m/z 190-67.8%; m/z 157-100%, m/z 158-29.2%; m/z 144-73%; m/z 131-42%.

The closeness of the IR, PMR, and mass spectra to those of vincamajine [2, 3] permitted the assumption that base (I) was an isomer of vincamajine. In order to prove this, an epimerization was performed: 0.45 g of vincamajine, 0.7 g of fluorenone, and 0.25 g of potassium tert-butanolate were dissolved in 50 ml of anhydrous benzene and the solution was boiled under reflux in nitrogen for 3 h. The resulting ketone - vincamajinone - was then reduced with sodium tetrahydroborate in absolute methanol [4, 5]. After appropriate purification, by preparative TLC (LS 5/40 silica gel; chloroform-methanol (6:1)) the mixture of reaction products yielded substance (II) with R_f 0.46. The base proved to be identical with vincamajinine. IR spectrum, cm^{-1} : 3100-3200 (-OH); 1750, 1250 (-COOCH₃); 765 (disubstituted benzene ring). Mass spectrum: M⁺ 366. PMR spectrum: -COOCH₃, δ = 3.72 ppm (s); >NCH₃, δ = 2.65 ppm (s); C₁₉H, δ = 5.31 ppm (q); C₁₈CH₃, δ = 1.62.

All these facts permitted the assumption of the structure of the 17-epimer of vincamajine for vincamajinine.

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