

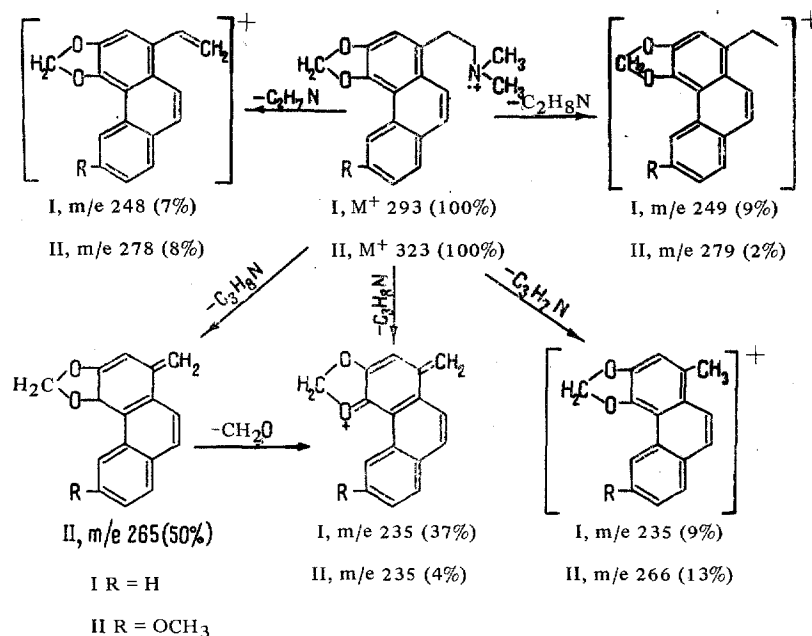
A MASS SPECTROMETRIC STUDY OF DES-BASES

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Khimiya Prirodnikh Soedinenii, Vol. 4, No. 6, P. 390, 1968

The presence of the maximum peak of the molecular ion is characteristic for the mass spectra of des-N-methyl-1-isoermerine (I) and des-N-methyl-O-methylisofugapavine (II) [1]. The spectrum has the peaks M-44, M-45, M-57, and M-58, which are formed, respectively, by the loss by the molecular ion of C_2H_6N , C_2H_7N , C_3H_7N , and C_3H_8N groups, and also the peak of the M + 1 ion. However, the spectra do not exhibit the peaks of the ions M-1 and M-15 which are characteristic of the aporphine alkaloids.

In the spectrum of des-N-methyl-O-methylisofugapavine there is a peak with m/e 235, which arises from an ion with m/e 265 by the loss of a formyl group.



The spectra were taken on an MKh-1303 mass spectrometer at an ionizing potential of 70 eV and at temperatures of 120 and 210° C, respectively.

REFERENCE

1. S. Yu. Yunusov, V. A. Mnatsakanyan, and S. T. Akramov, DAN UzSSR, no. 8, 43, 1961; Izv. AN SSSR, ser. khim., no. 3, 502, 1965.

5 May 1968

Institute of the Chemistry of Plant Substances, AS UzSSR

UDC 547.944/945

STRUCTURE AND CONFIGURATION OF KORSEVERINE

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Khimiya Prirodnikh Soedinenii, Vol. 4, No. 6, pp. 390-392, 1968

The IR spectrum of korseverine $C_{27}H_{41}O_2N$ [1] has ν_{\max} 3510, 3390, 1060 cm^{-1} ($-OH$), 2920-2870 and 1440 cm^{-1} ($-CH_3$), 2760 cm^{-1} (trans-quinolizidine), 1703 cm^{-1} ($>CO$), and 1650 cm^{-1} ($C=C$), and its UV spectrum has λ_{\max} 300 μ ($\log \epsilon$ 2.07) (ethanol). Acetylation of the alkaloid with acetic anhydride in pyridine gives acetylkorseverine (II) with mp 185-186° C, R_f 0.9. The IR spectrum of the latter has ν_{\max} 2960-2860, 1450 ($-CH_3$), 2730 (trans-quinolizidine)