PETSIDINE FROM Korolkowia sewerzowii

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Continuing an investigation of the epigeal part of Korolkowia sewerzowii Regel., the methanolic mother solution from korseveriline and the acetone mother solution from korseveridine [1] were chromatographed separately on a column of alumina. Elution was carried out with chloroform-methanol (10:0.3 and 10:0.5, respectively). The chloroform-methanol (10:0.3) eluate yielded a base with mp 182-183°C (benzene) (I),  $[\alpha]_{\rm D}$  -17° (c 0.71; chloroform). The IR spectrum of (I) contained absorption bands at  $(cm^{-1})$  3400 (OH), 2950-2865 and 1440 (-CH<sub>3</sub>, -CH<sub>2</sub>-), and 1730 and 1260 (C=O of an ester group). Elution with chloroform-methanol (10:0.5) gave a base with mp 150-152°C (acetone) (II),  $[\alpha]_D$  -13° (c 0.7; chloroform), M<sup>+</sup> 427.

In addition to korsemine, the mother liquors from sevcorine [1, 2], on elution with benzene-methanol (10:0.5 and 10:1), yielded a base (III) with mp 205-207°C (acetone). The IR spectrum of (III) contained absorption bands at (cm<sup>-1</sup>) 3430 (OH); 1740, 1250 (C=0 of an ester group); and 1125-1030 (broad absorption band characteristic for glycoalkaloids).

When (II) was acetylated with acetic anhydride in pyridine, a 0,N-diacetyl derivative (IV) was obtained with  $M^+$  511. Its IR spectrum contained absorption bands at (cm<sup>-1</sup>) 1730, 1245 (0-Ac); 1710 (0=0); and 1665 (N-Ac). Its PMR spectrum contained singlets at (ppm) 0.62 (3 H, 19-CH<sub>3</sub>); 0.72 (3 H, 18-CH<sub>3</sub>); 1.96 (3 H, OCOCH<sub>3</sub>); and 1.98 (3 H, N-COCH<sub>3</sub>), and two doublets at 1.08 and 1.15 from secondary methyl groups.

A comparison of the physical constant and spectral characteristics of alkaloid (II) and of an authentic sample of petisidine [3-7] showed their identity (melting point of a mixture, Rf values, and IR, PMR, and mass spectra).

This is the first time that petsidine has been detected in plants from the genus Korolkowia.

## LITERATURE CITED

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