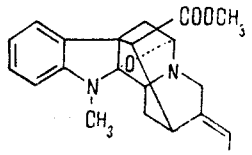
identity [1, 2]. Consequently, the alkaloid that we isolated is kopsinilam.

The second base had the composition $C_{21}H_{24}N_2O_3$ with mp 156°–157° C (methanol), $[\alpha]_D$ + 93° C (c 0.20; chloroform) and contained a methoxy and a $N-CH_3$ group. Oxidation of the alkaloid by the Kuhn-Roth method showed the presence of one $C-CH_3$ group. The IR spectrum of the base had absorption bands at 1750 cm^{-1} ($COOCH_3$), 1085 cm^{-1} (C—O—C), and 750 cm^{-1} (disubstituted benzene ring) and lacked bands characteristic for OH and NH groups.

These data permit the assumption of the following analytical formula for the base:

$$C_{18}H_{18}\,(=N-CH_3)\,(=N-)\,(COOCH_3)\,(-O-).$$

The IR spectrum of the base had three maxima: λ_{max} 228, 276, 316 (log ε 4.43, 3.97, 3.16) and was similar to the spectra of picrinine, picroline, and Ψ-akuammigine [3, 4]. Consequently, the base contains an analogous chromophore system and the following structural formula has been proposed for it as the most probable



This alkaloid proved to be new and has been called ervincine.

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ALKALOIDS OF THE SEEDS OF HAPLOPHYLLUM DUBIUM

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The ripe seeds of H. dubium Eug. Kor., collected at the end of July in the Surkhandar Region, UzSSR, were defatted with gasoline, and the extract was treated with 10% sulfuric acid. Dubamine sulfate [1] separated out, and the mother liquor, after neutralization and elimination of the solvent by distillation, gave an oil. The yield of dubamine was 0.3% and that of the oil 10%. No other alkaloids were detected in the gasoline extract.

Chloroform extraction of the defatted seeds gave an additional 0.24% of combined bases. The total yield of alkaloids was 0.54%. Chromatography of the combined bases of the chloroform extract on alumina gave five alkaloids, which were identified with authentic samples: with haploperine from H. perforatum [2], with foliosine and skimmianine from H. foliosum [3], and with dubinidine and dubamine from the epigeal part of H. dubium [4].

The leaves of H. dubium, also gathered at the budding stage, contained 0.62% and the stems 0.21% of total bases. At the end of the flowering and the beginning of the fruit-bearing period, the amount of alkaloids in the epigeal part increased to 1.07% in the leaves and 0.3% in the stems. The separation of a mixture of bases from the epigeal part on alumina yielded, besides dubamine and dubinidine, foliosine and haploperine.

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STRUCTURE OF PERFORINE AND HAPLOPHYLLIDINE

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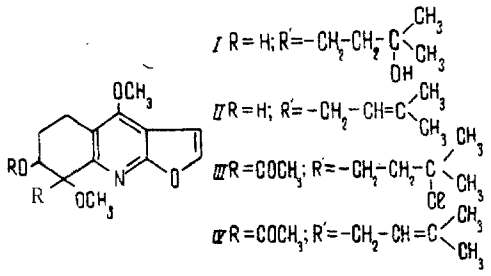
The isolation of two new alkaloids, perforine [1] and haplophyllidine [2], from the seeds of Haplophyllum perforatum has been reported previously. These bases are similar in structure and give a number of identical derivatives. The results of a study of the chemical transformations and of the UV, IR, mass, and NMR spectra of perforine (I), haplophyllidine (II), and their derivatives enables the following structures to be proposed for them:



The structural similarity of these alkaloids was shown by a passage from perforine to haplophyllidine by the following route: perforine (I) → chloroacetylperforine (III) → acetylhaplophyllidine (IV) → haplophyllidine (II).

Perforine and haplophyllidine are the first representatives of the series comprising the furano-5, 6, 7, 8-tetrahydroquinoline derivatives.

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