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The alkaloids protopine, d- and dl-bicuculines, d- β -hydrastine, l-adlumidine, scoulerine, coreximine, sanguinarine, wilsonirine, and corphthaline have been isolated from Corydalis pseudoadunca M. Pop. [1-6]. Continuing a study of the epigeal part of this plant collected in Kaltabulaksae in the flowering phase, we have obtained by chloroform extraction 1.39% of combined alkaloids and have separated them into phenolic and nonphenolic fractions. By separating the combined material according to solubility in organic solvents and also by chromatography in a column of silica gel, in addition to the alkaloids mentioned above, with the exception of dl-bicuculine, we have isolated juziphine [7], coclaurine [8], reticuline [9], stylophine [10], sibiricine [11], and base (I). All the compounds were identified on the basis of special characteristics, and also by comparison with authentic samples.

Base (I) was amorphous, $[\alpha]_D^{+27} +27^\circ$ (c 0.3; methanol). The mass spectrum exhibited a weak peak of the molecular ion with m/z 345, and also the peaks of ions with m/z 329, 328, 327, 192 (100%), and 137. The PMR spectrum of the base taken in deuteropyridine contained signals in the form of three-proton singlets at 3.03 ppm from a N-methyl group and at 3.59 and 3.64 ppm for two methoxy groups. In the aromatic region of the spectrum at 6.50-7.70 ppm there were the signals from five aromatic protons. Methylene and methine protons appeared at 2.59-4.90 ppm.

The spectral characteristics, and also the poor solubility of the base in organic solvents and the difference of 16 mass units from the molecular weight of reticuline suggested that it was reticuline N-oxide. When the base was reduced with zinc in sulfuric acid, a product identical with reticuline (IR spectrum TLC) was obtained. Reticuline N-oxide has been obtained previously from Pochygone ovata (family Menispermaceae) [12] but its specific rotation was not given.

This is the first time that (+)-reticuline N-oxide has been detected in plants of the family Papaveraceae.

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