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We have studied the alkaloid composition of three species of *Cephalaria* Schrad., family Dipsacaceae (*C. kotschyi* Boiss. et Hoh., *C. nachiczevanica* Bobr.) collected in the environs of Bata-Bata (Nakhichevan Autonomous SSR), and *C. gigantea* (Ledeb.) Bobr., collected in the town of Shusha, AzerbSSR, in the flowering period (July, 1974). The total alkaloids were extracted from the roots of *C. kotschyi*, *C. nachiczevanica*, and *C. gigantea* with chloroform, amounting to 0.52, 0.20, and 0.25% (on the air-dry raw material), respectively.

By chromatography in thin layers [solvent: KSK silica gel, Silufol; solvent system: chloroform-methanol (19 : 1); chromogenic agent - Dragendorff's reagent] we found four substances, with R_f 0.87, 0.71, 0.39, and 0.11 in the combined alkaloids from each plant. The qualitative compositions of the combined alkaloids from all three species were identical, the main substance being that with R_f 0.87.

After a sulfuric acid solution of the combined alkaloids from *C. kotschyi* had been made alkaline with ammonia (pH 7.5-8.0), extraction with ether yielded a base (I) with mp 81-82°C (from petroleum ether), $[\alpha]_D^{20} \pm 0^\circ$ (ethanol). The hydrochloride had mp 172-173°C (from acetone).

On the basis of the physicochemical constants of this base and certain biogenetic considerations, it was assumed that base (I) was gentianine [1, 2]. A mixture of the substance isolated with an authentic sample of gentianine gave no depression of the melting point, and their IR spectra and R_f values (TLC) coincided completely.

By chromatography in thin layers using authentic samples, the combined alkaloids of all three species of *Cephalaria* were shown to contain the alkaloids gentianadine (R_f 0.71) and gentianaine (R_f 0.39).

This is the first time that the alkaloids gentianine, gentianadine, and gentianaine have been found in representatives of the genus *Cephalaria* [3].

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