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ALKALOID CONTENT OF SOME PLANTS OF THE FAMILY LABIATAE

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We have studied 30 species of plants of the family Labiatae growing in Uzbekistan for their alkaloid content; 15 of them gave a positive reaction for alkaloids. As a result of the quantitative determination and isolation of nitrogen bases by the chromatographic method (on a column of neutral alumina), we obtained two fractions. The first fraction (elution of the bases with 10-20% solutions of ethanol in chloroform), consisted of stachydrine and the second (elution with 20-40% solutions of ethanol in chloroform), consisted of liquid bases.

The amounts (%) of stachydrine were: in *Marrubium alternidens* Rech., 1.16; in *Sideritis montana* L., 0.82; in *Eremostachys speciosa* Rupr., 0.35; in *Lamium album* L. (white deadnettle), 2.01; in *Leonurus turkestanicus* V. Krecz et Rupr., 1.5; in *Lagochilus setulosus* Vved., 1.3; in *L. Pubesceus* Vved., 0.71; in *L. inebrians* Bge., 0.52; in *L. platycalyx* Schrenk., 1.45; in *Stachys betoniciflora* Rupr., 0.74; in *S. hissarica* Rgl., 0.47; and in *Scutellaria immaculata* Nevsci ex Juz, traces.

The amount of liquid bases in these plants varied from 0.14 to 3.29%, apart from *Lagochilus platycalyx* Schrenk., where they were absent.

In the qualitative investigation of the bases isolated by the method of descending chromatography on paper of type FN-3 (medium speed) a base was found with R_f 0.33 in system 1 [1-butanol-acetic acid-water (4:1:5)] and R_f 0.88 in system 2 (15% acetic acid). This base was shown to be identical with an authentic sample of stachydrine. A base with R_f 0.22 was shown chromatographically to be identical with choline. The latter was found in six plants.

A base with R_f 0.37 in system 1 was found in all the plants except *L. platycalyx* and one with R_f 0.43 in system 1 in six plants.

Characteristic of *Lagochilus* Bge. from the section *Inermus* is a base with R_f 0.9 (system 1) and 0.8 (system 2)—a white crystalline substance readily soluble in methanol, ethanol, and acetone, and sparingly soluble in water, not fluorescing in UV light, mp 105° C. The study of this base is continuing.

Thus, in an investigation of plants of the family Labiatae we have found stachydrine, choline, and unknown bases.

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