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We have investigated the total bases and the known alkaloids in various organs of the plant Korolkowia sewerzowii Rgl. (gathered in 1984 at Saryagach, near Tashkent) according to the vegetation periods.

Comminuted air-dry samples of the plant were moistened with 10% ammonia and were extracted with chloroform. The alkaloids were re-extracted from the chloroform extract with 5% sulfuric acid. The acid solution was made alkaline with ammonia, and the alkaloids were extracted with chloroform. The results that we obtained on the dynamics of the accumulation of the total alkaloids and their main components in the plant are given below (K, korseveriline; S, sevedine; SC, sevcorine):

Plant organ	Date of collection	Amount, % on total alkaloids	the weight of the dry plant, of: the main alkaloids
Bulbs	March 13-beginning	1,56	K 0,7 ; S 0,12; SC 0,08
Stems	of vegetation	3,10	K 1.3; S 0.22; SEQ, 15
Leaves Bulbs	April 3-flowering	2,95 1,45	K 1,2; S 0,2; SC 0,15 K 0,82; S 0,2; SC 0,12
Stems		1,75 1,87	К 0,63; S 0,14; SC 0 07 К 0,62; S 0,15; SC 0,1
Leaves Flowers		1,60	K 0.6; S 0.07; SC 0.03
Bulbs	April·8-ripening of	1,18	K 0,44; S 0,05; SC0,007
Stems	seeds	0,42	K 0, 16; S 0,02; SC 0,004
Leaves		0,3	K 0, 1 ; S 0, 01; SC 0, 003
Seeds		0.36	K 0, 13; S 0,01; SC (traces)
Pods		0.41	K 0.13; S 0.01; SC 0.001

The combined alkaloids were separated as described in [1-3]. The largest amount of the combined alkaloids in the stems and leaves was observed in the early vegetation period, and the smallest amount in the seed-ripening stage. With the growth of the plant, the total amount of bases in the bulbs decreased.

Korseveriline, sevedine, and sevcorine were detected in various organs of the plant. The amount of korseveriline and sevedine was higher than that of sevcorine in all the organs. Sevcorine was detected in the seeds only in trace amounts.

LITERATURE CITED

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