

Comparative notes. According to Lantz and Cyren (1936, Lacerta caucasica, described first by M hely as an excellent species, does not deserve the rank of a species and should be regarded only as one of the subspecies of L. saxicola. In confirmation of their view, the above investigators referred to the habitual similarity of L. caucasica with the Transcaucasian forms armeniaca and mixta and to the fact that some type material used in the description of L.s. gracilis differs little from the typical L. caucasica. It has already been shown that the specific independence of this species was based not only on distinct morphological characters but also on the fact that in the existing zone of sympatry of L. caucasica with L.s. branneri and L.r. rudis, hybrids are conspicuous by their absence. As would be demonstrated later on, the observed similarity of L. caucasica with some specimens of L.s. daghestanica (= L.s. gracilis) is explained by the actual genetic similarity of these 2 forms.

Specimens examined. Georgia: ZIL 14412 (2), Verkhnee Bagini, Dusheti region; 17102 (6), Dusheti; 17431 (14), Darial gorge; 17443 (40), between Mleti and Gudauri; 17786 (31), Kazbegi; 17819 (31), Lagodekhi, upper cordon; 17883 (18), Verkhnyaya Svanetia, upper reaches of Mulkhury River; SMG (3), Pasanauri; (4) Lebarde, Geogechkor region; (5) Lentekhi; (4) Gornaya Tushetia. Southern Osetia; ZIL 17742 (40), between Vaneli and Zemo-Rok, road on Rok pass; GMG (4) at lake Ertso. Azerbaijan: ZIL 9575 (5), Nukhin region; 17813 (5), Zakataly, lower cordon; 17842 (16), Zakataly reserve forest area; 17924 (4), Tfan mountain. Daghestan: ZIL 17732 (52), Rutul, road in Borch; 17925 (4), Kulin region. Checheno-Ingush; ZIL 17744 (43), Vedeno, upper elevation in Andii range.

Northern Ossetia: ZIL 16657 (12), Alagir; 16658 (2), Nakh gorge; 17790 (18), around Balta, lowland of Darial gorge. Kabardi-no-Balkariya: ZIL 16343 (4), Golubye lakes; 17792 (6), Tegenekli, Baksan gorge; 17884 (38), Chegem River gorge at waterfalls; 15587 (13), Golubye lakes.

Lacerta caucasica alpina ssp. n
(Fig. 50; Photo. 25)

L. caucasica, M hely (part.), 1909:560; Nikolskii (part.), 1913:84.-- saxicola caucasica, Nikolskii (part.) 1915:380.-- saxicola var. caucasica, Bertenev and Reznikova, 1935:20.

Holotype, ZIL, Academy of Sciences, USSR, 17942, 6, around village Terskol in Kabardino-Balkariya, 2200, m above sea level. August 15, 1965, collected by I.S. Darevsky (Fig. 25B).

Paratypes. ZIL, Academy of Sciences, USSR, 17432 (26),
 Pseashkoh pass in Krasnodar territory, 2000 m above sea level, July
 14, 1961, collected by I. S. Darevsky.

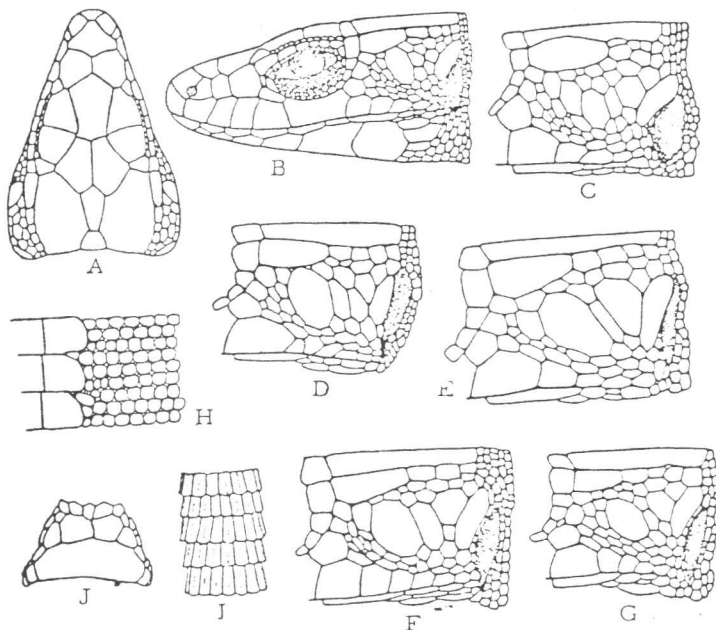


Fig. 50. Major scalation of *L. c. alpina*.

A - Head, dorsal view; B - head, lateral view; C-G - temporal region; H - contact zone between dorsal and ventral scales; I - dorsal anterior third of tail; J - anal region. (F, G - Pseashkoh pass; rest - Terskol).

Description of holotype. The width of the frontonasal is noticeably greater than its length (sometimes equal to it in paratypes). The rostral clearly reaches the frontonasal (in 80 percent of the paratypes). The suture between the frontonasal and postnasal is somewhat shorter than that between the nasals (in paratypes, it is quite often reduced to an interrupted one or completely absent so that the frontonasal is completely separated from the postnasal). The sutures between the frontonasals and nasal are straight. Granules are absent between the supraciliary and supraocular scales (an interrupted row of 2 - 11 granules occurs in many of the paratypes). The upper postorbitals do not reach the parietal (sometimes reach it in paratypes). The first supratemporal is long, constricted and truncated posteriorly; posterior of it, on each side of the head, there are 4 small, subequal posttemporals. A very prominent wedge-shaped temporal lies between the large midtemporal and tympanic; it is tightly juxtaposed to

the tympanic and is separated from the midtemporal by 2 small scales lying one over another (in paratypes, the scales separating the midtemporal and tympanic vary considerably in size and shape; further more, the largest frequently exceeds the size of the tympanic). The collar is straight at the back. Along the midline of the throat to the collar, there are 22 scales.

The body scales are prominent, slightly larger on the sides; around midbody, there are 44 scale rows. The ventral scales touch 3 body scales laterally and are arranged in 24 transverse rows. The large and broad anal is surrounded anteriorly by a row of 8 preanals, the 2 middle ones are much larger than the others (in paratypes, sometimes a small third one is wedged between the 2 large preanals). The femoral pores on each side number 18 and 19. Ventrally on the right thigh, there are 5 transverse rows of tiny scales between the pores and the outer row of enlarged scales. The dorsal scales of the crus are smaller than the body scales and have faint spinules. Around the middle of the crus, there are 19 scale rows. The scales on the anterior third of the tail have barely visible keels dorsally and more distinct longitudinal keels laterally. The posterior edge of the caudal scales incline slightly backward at a low angle. The snout-vent length is 60 mm; the ratio of its length to the length of the unregenerated tail is 0.54.

The color of the dorsum is grayish-green, much darker along the spine (in several paratypes, the color of females and males varies from green, yellowish-green, olive green, grass green, bluish-green, apple green, sandy, brownish-gray, ochreous, and almost black). The occipital stripe is formed of two closely - spaced longitudinal rows of dark brown irregular blotches along the spine (in paratypes, the dimensions and positions of these blotches vary greatly, they are frequently absent or reduced to tiny blotches and specks). The broad temporal stripes with scalloped upper edges are formed of 3 rows of contiguous dark ocelli with bright, whitish centers. In several paratypes, the centers are very bright or, the converse, dull so that the temporal stripes look absolutely dark. In some specimens, the temporal stripes are bordered dorsally by bright ciliary lines, in many cases broken into a series of bars.

Along the lower edge of the temporal zones, there are bright ocelli which are at places lined with dark ones. The ventral color (live lizards) is yellow or greenish-yellow. Individual variation of the basic taxonomic characters is depicted in Table 21 for several paratypes.

Table 21

Geographical variation of *Lacerta caucasica alpina*

Characters	Cheget hill, around Terskol (Kabardino-Balkaria), N = 30 (15 ♂♂, 15 ♀♀)			Psechikho pass (Kranodar territory), N = 20 (10 ♂♂, 10 ♀♀)			♂ Around Teberda N = 5 (2 ♂♂, 3 ♀♀)			Subspecies as a whole, N = 55 (27 ♂♂, 28 ♀♀)		
	Range of variation	M ± m	♂	Range of variation	M ± m	♂	Range of variation	M ± m	Range of variation	M ± m	Range of variation	M ± m
1 ♂♂	51-64	56.67 ± 1.12	52-64	56.90 ± 1.25	57-65	60.8 ± 1.44	51-65	57.06 ± 0.81	4.24			
1 ♀♀	51-64	59.20 ± 0.99	56-64	59.70 ± 0.86	53-59	57.3 ± 1.35	51-64	59.17 ± 0.62	3.33			
2 ♂♂	86-116	103.50 ± 2.74	87-113	98.00 ± 4.30	—	—	86-116	101.30 ± 2.02	10.10			
2 ♀♀	92-103	96.86 ± 1.79	85-107	97.29 ± 2.92	—	—	85-107	97.03 ± 1.22	6.13			
3 ♂♂	0.49-0.60	0.53 ± 0.010	0.50-0.60	0.56 ± 0.016	—	—	0.49-0.60	0.54 ± 0.008	0.04			
3 ♀♀	0.51-0.67	0.59 ± 0.019	0.55-0.68	0.61 ± 0.017	—	—	0.51-0.68	0.60 ± 0.01	0.058			
4	40-53	46.43 ± 0.51	40-50	46.25 ± 0.59	41-49	46.0 ± 1.42	40-53	46.30 ± 0.37	2.76			
5	18-27	21.83 ± 0.31	18-26	21.35 ± 0.46	18-21	19.4 ± 0.60	18-27	21.43 ± 0.26	1.94			
6	14-20	17.13 ± 0.23	14-20	17.03 ± 0.35	16-20	17.9 ± 0.69	14-20	17.17 ± 0.2	1.54			
7	0-11	4.67 ± 0.51	0-11	4.68 ± 0.77	0-4	1.9 ± 0.52	0-11	4.42 ± 0.41	3.04			
7a	90	—	70	—	—	—	—	—	—			
9 ♂♂	22-25	23.60 ± 0.21	22-25	23.80 ± 0.39	24-24	24.00 ± 0.00	22-25	23.70 ± 0.18	0.98			
9 ♀♀	24-27	25.47 ± 0.26	24-27	25.90 ± 0.31	25-26	25.6 ± 0.26	24-27	25.63 ± 0.19	1.01			
10	2-2	2.00 ± 0.00	2-3	2.25 ± 0.10	2-2	2.00 ± 0.00	2-3	2.09 ± 0.037	0.49			
11	1-3	1.78 ± 0.10	1-3	1.97 ± 0.11	2-2	2.00 ± 0.00	1-3	1.86 ± 0.06	0.49			
12	2-4	3.27 ± 0.10	2-4	2.90 ± 0.12	3-4	3.4 ± 0.16	2-4	3.14 ± 0.07	0.55			
13 ♂♂	2-3	2.97 ± 0.05	2-3	2.75 ± 0.14	2-3	2.48 ± 0.00	2-3	2.81 ± 0.07	0.37			
13 ♀♀	2-3	2.80 ± 0.10	2-3	2.80 ± 0.13	2-3	2.5 ± 0.52	2-3	2.76 ± 0.1	0.53			
14	15-19	16.47 ± 0.20	17-20	18.60 ± 0.23	16-18	16.6 ± 0.40	15-20	17.25 ± 0.19	1.459			
15	4-6	5.23 ± 0.09	4-6	4.75 ± 0.14	5-6	5.6 ± 0.16	4-6	5.07 ± 0.08	0.60			

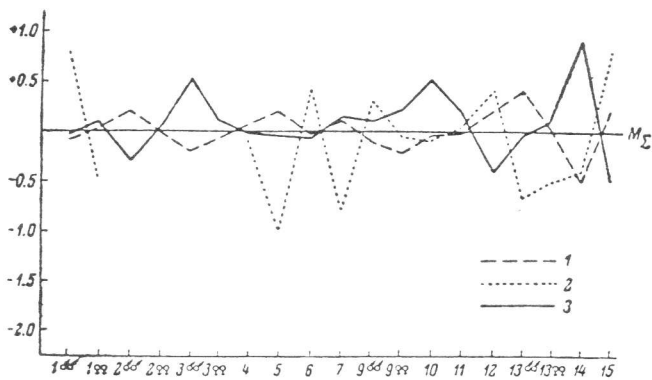


Fig. 51. Summary graph of variation of *L. c. alpina*.

1 - Cheget hill; 2 - Teberda; 3 - Pseashkho pass.

Geographical distribution. This rock lizard is encountered on the elevated sections of the western half of the Bolshoy Kavkaz range from Elbruz in the east to Fisht and Oshten in the west. The eastern edge of the range extends into the upper reaches of Baksan River along the southeastern slopes of the Elbruz and Cheget mountains in Kabardino-Balkarya. Farther in the west, it is widely distributed in the upper reaches of Kubana, Teberda, Zelenchuk, Laba, Belaya and other rivers flowing northward, and, on the southern slopes in the upper reaches of Vzibi and its tributaries in Abkhaziya and the upper courses of the Mzymta River in southeastern Krasnodar territory. The western most occurrences are known from the slopes of Fisht. (Fig. 48, 3).

Geographical variation. Samples were studied from 3 populations on the northern and southern slopes of the Glavnyi range, separated from east to west by distances of 80 to 85 km. As may be seen from Fig. 51, the extreme populations from Lake Terskol and from Pseashkho pass differ very slightly from each other in several characters; a somewhat greater positive deviation of many characters in the lizards from western populations indicate a tendency towards a variational cline from east to west. At the same time, the intermediate sample from around Teberda Lake differs considerably in several characters from the specimens of extreme populations which is evidently the result of the effects of some instances of hybridization with the sympatric *L. s. saxicola*. Let us also remark that some specimens from mixed populations of the upper courses of the Baksan gorge should be regarded as intermediates between *L. c. caucasica* and *L. c. alpina*.

Comparative notes. Even Méhely (1909) justifiably doubted the genetic relationship of the two poorly preserved rock lizard specimens available to him, from Pseashkho with the species Lacerta caucasica described by him. Lantz and Cyren (1936) also included only Central Caucasus and Daghestan in the range of their L. s. caucasica leaving open the question of the genetic relationship of lizards from northern and north-western Caucasus with this form.

The extensive original material collected by us in fact showed that the lizards inhabiting the elevated parts of the Glavnyi Caucasus range to the west of Elbruz were not the typical L. caucasica but a special subspecies of this species called L. c. alpina. Nikolskii's observations (1913, 1915) and the much later communication of Bartenev and Reznikova (1935) on the find of L. s. caucasica in western Caucasus should be connected to this form.

Specimens examined. Krasnodar Territory: ZIL 16305 (6) southern slope of Oshten mountain; 17432 (27), Pseashkho pass; 17459 (13), Achishkho mountain at the waterfall; 17966 (3), Fisht mountain. Krachai-Cherkess Autonomous Region. ZIL 16913 (5), Teberda, Ullu-Murudzhu river; 17976 (9), Teberda, Ullu-Murudzhu river. Kabardino-Balkariya; ZIL 17795 (4), Terskol; 17881 (43), northern slope of Cheget mountain; 17959 (17), Elbrus mountain. Abkhaziya: ZIL 17467 (1), Dou pass; 17963 (1), Anchkha pass on Lashipse River.

AGAMIC SPECIES

Lacerta armeniaca Méhely, 1909
(Table II C, Fig. 52, Photo 21)

L. muralis fusca var. saxicola, Bedriaga (part.), 1886:179 (195). -- muralis Boettger (part.), 1893:84. - muralis var. chalybdea, Boulenger (part.), 1904:337, 338; 1913:187, Table 22, fig. 2; 1920:279. -- saxicola armeniaca, Mehely, 1909:549, tab. 21, fig. 5. -- Nikolskii, 1913:78; Lantz and Cyren, 1936:165; Terentiev and Chernov, 1949:168; Darevsky, 1957:40. -- saxicola var. chalybdea, Nikolskii, 1915:337. -- armeniaca, Darevsky, 1966b:127, fig. 3 A.

Lectotype -- Senchenbergische Natur-Museum, 12066 ♀, the village Elenovka (Sevan) on the bank of Lake Sevan in Armenia, 1892. Collected by V. Varva.

Description -- The width of the frontonasal is greater than or rarely equal to its length. The rostral is set off from the frontonasal or,