

Specimens examined. Georgia: ZIL 17440 (21), gorge of Akhalkalakichai River below Akhalkalaki; 17441 (8), around Akhalkalaki, 17470 (11), around Akhalkalaki; (11), gorge of Kura between Akhalsyke and Aspindza.

Lacerta rudis obscura Lantz and Cyren
(Table, 1, B, Fig. 45, Photo. 15).

L. saxicola obscura Lantz and Cyren, 1936:165, 176; Terentiev and Chernov, 1949:188. -- saxicola rudis, Petrov, 1964:53.

Holotype. Not designated. Described by Lantz and Cyren from samples around Borzhomi.

Description. The width of the frontonasal is greater than or equal to its length. The rostral is set off from the frontonasal or rarely touches it by a narrow suture. The suture between the frontonasal and postnasal is not shorter, and often broader, than that between the anterior and posterior nasals. The sutures between the prefrontal and frontal are straight or slightly concave inside the frontal. The supra-ciliaries and suprooculars are separated by a full, very rarely interrupted, row of 4 - 17 granules. The upper postorbital usually touches the parietal by a short suture or at a point. The first supratemporal is short or moderate and is slightly constricted posteriorly: the 2-7 posttemporals do not differ in size from the other tiny scales of the temporal region or are very faint. The medium-sized midtemporal is separated from the posttemporal by 2 - 5 and from the moderately-sized tympanic by 1 - 4 longitudinal rows of tiny scales. In many cases, the midtemporal is absent. The collar is not serrated. There are 25 - 32 scales along the midline of the throat to the collar. The body scales are protruding or conical, noticeably enlarged laterally, frequently with weak longitudinal keels, invariably more prominent in the posterior third of the back and at the edge of the abdomen. The ventral scales laterally touch 2-3 dorsal scales in males and females: the ventral and pectoral scales lie in 21 - 26 transverse rows in the former and 22 - 27 in the latter. The anal is large; anterior of it, one large preanal rounded at the back is symmetrically arranged; rarely, there are 2 enlarged preanals. The femoral pores number 15 - 22. On the underside of the thigh, there are 4 - 6 longitudinal rows of tiny scales between the femoral pores and outer row of large scales. The dorsal scales of the crus are noticeably larger than the body scales and have well-developed longitudinal keels, the middle of the crus, there are 13 - 17 scale rows. The dorsal and lateral scales on the anterior third of the tail have well-developed longitudinal

scales on the anterior third of the tail have well-developed longitudinal keels, truncated posteriorly or stretched backward at an acute angle; the ends of keels on the lateral scales are prominently upturned in the form of small spinules. The snout-vent length is 45-71 mm in males and 56-69 mm in females; the ratio of snout-vent length to that of the unregenerated tail is 0.43 - 0.59 and 0.45 - 0.56, respectively. The color of the male dorsum is dull green, ivy green, brownish-green, dark sandy, fawnish brown, fawn or dark brown, and of females dark sandy, nutbrown, brownishfawn or olive gray. The midoccipital stripe is formed of innumerable tiny or medium-sized black or dark brown blotches concentrated along the dorsal midline and occasionally forming a reticular pattern. The temporal stripes along the sides usually consist of 3 rows of fairly prominent, fused, dark ocelli with distinct whitish (bluish in the pectoral zone) centers. Along the irregular upper edge, these stripes are usually edged by a row of whitish ciliary spots and sometimes, particularly in females, one or 2 rows of similar spots also extend along the edges of the midoccipital stripe. Specimens are also encountered in which the pattern is barely visible or completely absent (concolor form).

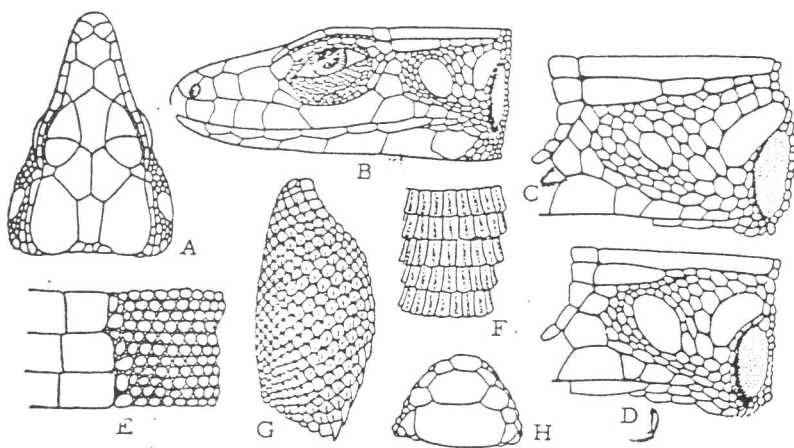


Fig. 45. Major scalation of *L. r. obscura*.

A - Head, dorsal view; B - head, lateral view; C, D - temporal region; E - contact zone between dorsal and ventral scales; F - dorsal anterior third of tail; G - upperside of ankle; H - anal region. (D - Abastumani; rest - Borzhomi).

The venter of males and females is yellowish, pale-honey, greenish-yellow or whitish in color. During the breeding season, the outer ventral scales and adjacent body areas in males and also a major part of the lateral ocelli become bright bluish-violet.

Geographical distribution. The major range of this subspecies encompasses Borzhomi gorge in the upper course of Kura and the gorge of its tributaries in Georgia from the Adigeni village in the west to the Akhaldaba railway station in the east. In the north, the range is bound by the slopes of the Meskhet range where, at places, it almost reaches the watershed as, for example, in the upper courses of the Kurtskhany River in the Zekari pass region. The southern boundary of the range extends along the northwestern and northern spurs of the Trialet range roughly along the line Aspindza-Bakuriani-northern slope of the Tskhra-Tskaro pass-upper course of the Tana river (fig. 47, 2). On the slopes of the Meskhet range, it is almost everywhere sympatric with *L. saxicola parvula* and in the Trialet range it is encountered at places together with *L. armeniaca* and *L. mixta*.

Geographical variation. Samples were studied from 3 populations separated from west to east by distances of 55 and 50 km (Table 19). As may be seen from fig. 46, the maximum value of most scale characters occurs in the intermediate populations in the Borzhomi gorge and only a few of them (characters 9, 14) reveal a distinct clinal variation increasing from west to east. On the whole, the absolute values of most characters may be said to increase towards east and west from the central populations in the Borzhomi gorge. This conclusion is also confirmed by further analysis of samples from the hill populations around Bakuriani.

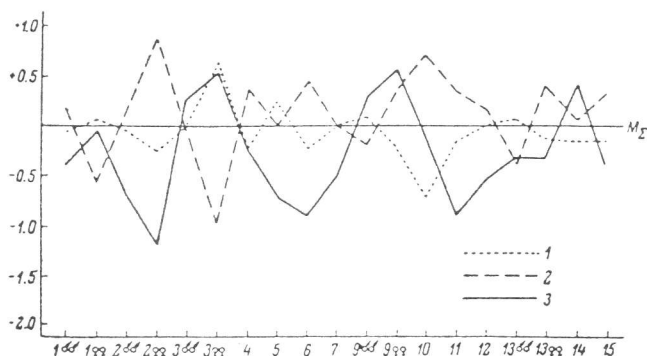


Fig. 46. Summary graph of variation of *L. r. obscura*.

1 - Abastumani; 2 - Borzhomi; 3 - Atensk gorge.

Comparative notes. Lantz and Cyren (1936) showed for the first time that the *Lacerta saxicola saxicola* of M ehely (1909) and Nikolskii (1913, 1915) from around Borzhomi should be in fact regarded as rightfully belonging to a separate subspecies *obscura* which is close to *L. s. rudis*. It resembles the latter in the presence of residual keeling on the body

Table 19

Graphical variation of *Lacerta rudis obscura*

Characters	Abastumani, N = 25 (15 ♂♂, 10 ♀♀)		Borzhomi, N = 25 (20 ♂♂, 5 ♀♀)		Atensk gorge (Georgid), N = 5 (4 ♂♂, 1 ♀♀)		Subspacies as a whole N = 55 (39 ♂♂, 16 ♀♀)	
	Range of variation	M ± m	Range of variation	M ± m	Range of variation	M ± m	Range of variation	M ± m
1 ♂♂	56-68	62.13 ± 0.97	55-71	62.80 ± 0.73	59-63	61.00 ± 0.82	55-71	62.36 ± 0.23
1 ♀♀	58-69	63.20 ± 0.99	56-64	60.4 ± 1.10	62	62.00 ± 0.00	56-69	62.25 ± 0.48
2 ♂♂	104-156	420.6 ± 5.25	415-437	423.82 ± 2.04	113	413.00 ± 0.00	104-156	121.48 ± 1.90
2 ♀♀	112-128	416.43 ± 2.03	422-423	422.67 ± 0.33	112	412.00 ± 0.00	112-128	418.10 ± 1.34
3 ♂♂	0.44-0.59	0.51 ± 0.01	0.43-0.56	0.49 ± 0.01	0.52	0.52 ± 0.00	0.43-0.59	0.50 ± 0.01
3 ♀♀	0.50-0.56	0.54 ± 0.008	0.46-0.53	0.49 ± 0.02	0.55	0.55 ± 0.00	0.46-0.56	0.52 ± 0.07
4	44-50	51.52 ± 0.54	48-58	53.04 ± 0.50	49-55	51.60 ± 1.08	44-58	52.22 ± 0.26
5	26-31	28.64 ± 0.29	25-32	28.32 ± 0.32	25-28	27.20 ± 0.58	25-32	28.36 ± 0.20
6	16-22	18.26 ± 0.31	16-21	19.06 ± 0.24	15-19	17.20 ± 0.57	15-22	18.53 ± 0.20
7	4-16	11.14 ± 0.49	6-17	11.22 ± 0.39	6-11	10.00 ± 0.69	4-17	11.07 ± 0.294
7a	20	—	4	—	—	—	—	—
9 ♂♂	22-24	23.27 ± 0.21	21-24	22.95 ± 0.61	23-24	23.75 ± 0.25	21-24	23.16 ± 0.32
9 ♀♀	22-27	25.30 ± 0.33	25-27	25.80 ± 0.37	26	26.00 ± 0.00	22-27	25.50 ± 0.14
10	1-2	1.04 ± 0.03	1-2	1.4 ± 0.02	1-3	1.20 ± 0.2	1-2	1.22 ± 0.003
11	1-4	2.54 ± 0.13	2-4	2.85 ± 0.12	2-3	2.10 ± 0.14	1-4	2.64 ± 0.087
11a	20	—	4	—	—	—	—	—
12	2-7	4.24 ± 0.16	2-6	4.32 ± 0.15	3-5	3.80 ± 0.28	2-7	4.24 ± 0.103
13 ♂♂	2-3	2.80 ± 0.10	2-3	2.78 ± 0.09	2-3	2.63 ± 0.26	2-3	2.77 ± 0.067
13 ♀♀	2-3	2.10 ± 0.31	2-3	2.50 ± 0.23	2-2	2.00 ± 0.00	2-3	2.22 ± 0.21
14	13-17	14.72 ± 0.16	13-16	14.88 ± 0.17	14-16	15.20 ± 0.37	13-17	14.84 ± 0.11
15	4-6	4.92 ± 0.08	4-6	5.12 ± 0.10	4-5	4.80 ± 0.2	4-6	5.00 ± 0.064

scales, large scales on the upperside of the ankle, and color pattern. Petrov's view (1964) that the subspecies obscura should be treated as a synonym of L.s. rudis has not been confirmed by our investigations. From all evidence, the adult male of rock lizards from the Atensk gorge in Georgia described by M^hely (1909) as a likely hybrid species Lacerta composita should be placed in the subspecies obscura.

Specimens examined. Georgia: 9859 (9), Borzhomi: 14430 (23) Borzhomi: 14414 (1), Bakuriani; 17057 (3), Borzhomi, road in Akhaltsikhe 17059 (3), gorge of Banis-Khevi near Borzhomi; 17171 (24), between Borzhomi and Akhaltsikhe; 17172 (15), Borzhomi, valley of the Borzhomki River; 17445 (36), around Abastumani; 17516 (3), Atskuri, Akhaltsikh region; 17540 (6), Abastumani, road in the Zekari pass; 17746 (7), upland of the Atensk gorge, Gori region; 17840 (10), gorge of the Borzhomki River; 17943 (1), road from Bakuriani in Tskhra-Tskaro pass; ZIU (63), Akhaldaba, Borzhomi, region; SMG (7), around Akhaltsikhe.

CAUCASICA GROUP

Lacerta caucasica caucasica M^hely 1909
(Fig.47; Photo.24)

L. saxicola, Kessler (non Eversmann), 1878:154.-- muralis fusca var. saxicola, Bedriaga (part.) 1886:195 (179).--muralis Boettger (part.), 1893:83.--caucasica M^hely, 1909:560, Table 21, fig.1, 2; Table 2, fig.1, Table 23, fig.1; Nikolskii, 1913:31; Mertens, 1922:173.-- muralis var. caucasica, Boulenger, 1913:198, Table 23, 3-5; 1920:275.-- saxicola-caucasica, Nikolskii, 1915:380; Lantz and Cyren, 1936:165; Terentiev and Chernov, 1949:188.

Lectotype. Senckenbergische Natur-Museum (Germany), 12069, ♂, Kazbek in central Caucasus, May 1, 1879, collected by G. Leder.

Description. The frontonasal is wider than long. The rostral is separate from the frontonasal or, rarely, touches across fairly broad suture. The suture between the frontonasal and postnasal scales is usually interrupted or considerably shorter than that between the anterior and posterior nasals; quite often, the postnasal does not reach the frontonasal at all. Between the supraciliaries and supraoculars, there is a full or interrupted row of 1 - 14 granules; in many cases, these granules may be completely absent. The upper postorbital usually does not reach the parietal. The first supratemporal is moderately long, slightly constricted,