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Türkiye için yeni olan üç Lacertidae türü

Three species of Lacertidae, new for Turkey

by MUHTAR BAŞOĞLU
(Department of Zoology, University of Istanbul)

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Özet: *Bu travayda Türkiye için yeni olan üç* Lacertidae *türü mütalâa edilmektedir. Bunlardan* Eremias pleskei *Başköy (Iğdır)*, Lacerta princeps *Hüseyni (Siirt)*, *ve* Lacerta agilis exigua *Asbua (Sarıkamış) da bulunmuşlardır. Bu zamana kadar* L. princeps *yalnız güney İrandan bilinmekte idi. Şimdi ise aynı tür, Anadoluda da bulunmakla, daha geniş bir yayılış sahası göstermektedir. Fakat şimdilik bu yayılışın devamlı olmadığı göze çarpıyor.* E. pleskei*'nin de müstakil bir tür olarak tanınması, bu zamana kadar biraz şüpheli görünüyordu; çünkü bu yeni tür ismi altında kaydedilmiş olan nümuneler* E. fasciata*'dan çok farklı değildi, ve bizim bildiğimiz kadar bunlardan ancak iki nümune tanınıyordu. En bariz karakter olarak femoral fethalar serisinin birbirinden çok ayrı olması bizim nümunelerde de görüldüğünden, Boulenger'nin de düşündüğü gibi,* E. pleskei*'yi ayrı bir tür olarak kabul etmek daha doğru olur.* L. agilis exigua*'ya gelince bu alt-tür, bize en yakın olarak, güney-doğu Rusyadan ve Ermenistandan bilinmekte idi. Bu alt-türün Türkiye için yeni oluşu daha ziyade bir siyasî hudut değişikliğinden ileri gelse gerektir. Gerek* E. pleskei *ve gerek* L. agilis exigua*'nın doğu Anadoludan şarka doğru yayılışları devamlıdır.* E. pleskei*'ye ait eski ve ilk kayıt Nahcıvan'dandır ki bizim bunları bulduğumuz saha da adı geçen mıntakanın biraz batısına düşmektedir.*

Bu travay için kıymetli yardımlarını esirgemiyen enstitümüz direktörü sayın profesörüm Ord. Prof. Kosswige teşekkürlerimi sunarım.

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INTRODUCTION

The three species of *Lacertidae* studied in this paper form a part of our reptilian collections obtained from the extreme Eastern Anatolia in the summers of 1942 and 1943. From the zoogeographical point of view, the discovery of *Lacerta princeps* in Turkey is interesting because it was hitherto known only from S. Iran, now it finds a wider range of distribution extending at least up to Asia Minor, though as far as I know, discontinuously. Perhaps our specimens may prove to be a distinct geographical race, points of deviation from the type and the specimen preserved in the British Museum being not few. Such disagreements are pointed out in dealing with the species; no attempt however is made to give new ranks, because the material on the whole is not rich enough to determine the range of characters in population. *Lacerta agilis exigua*

and *Eremias pleskei* are separated from their kindreds only by political boundaries, the respective range of each extending eastwards uninterruptedly. Although the former sub-species has been studied quite extensively, very little is known about the latter which was based only on two specimens from Nachitschewan. With our material it gains more right to stand as a distinct species and is saved from being attached to *E. fasciata* Blanf. with which it had once been regarded to be identical.

As these species are new for Turkey it seemed reasonable to give the major diagnostic characters of each also. These accounts are taken from BOULENGER and tested on our specimens.

I wish to express my best thanks to Prof. KOSSWIG for his interest and guidance in the collection and compilation of the Turkish herpetofauna the study of which we hope to continue.

Lacerta agilis exigua Eichw

Bibliography: G. A. Boulenger, Monogr. of Lacert., 1920; E. Schreiber, Herpetolog. Europea, 1912.

Locality and Date: Asbua (Sarıkamış), VIII. 1942.

No. and sex of specimens examined: 9 ♂, 11 ♀.

Habit: All in conformity with the account given by BOULENGER except in the following points: Generally the tail is short, the longest tail being 1 4/5 of head and body; in one of our specimens however (Collar No. 19) it is nearly twice as long. According to BOULENGER the hind limb in males is a little longer than in females, the longest in the former reaching as far as the elbow, in our specimens the hind limb in both sexes never reached beyond the wrist. Other measurements relating to different parts of body are tabulated bellow:

Coll. No. and sex of Specim.	Measurements in millimetres.									
	1	2	3	4	5	6	7	8	9	
1 ♂	92	35	24	18	12	27	39	20	140	
2 ♀	98	37	24	18	14	28	38	17	75	regen.
3 ♀	97	36	23	16	13	25	37	19	68	regen.
4 ♀	83	32	19	12	9	25	34	17	106	
5 ♂	84	34	22	18	11	26	35	17	125	
6 ♂	85	30	22	16	12	24	38	18	133	
7 ♀	96	35	24	16	12	28	40	18	85	regen.
8 ♂	95	36	22	18	11	26	42	20	62	regen.
9 ♀	90	35	21	18	11	29	35	19	83	regen.
10 ♀	90	35	20	17	12	27	35	18	130	
11 ♂	75	34	22	17	12	26	38	18	131	
12 ♂	95	37	24	17	11	29	46	23	150	
13 ♂	80	33	21	13	11	23	33	18	130	
14 ♂	76	27	19	14	10	22	33	17	67	
15 ♂	79	28	18	13	10	23	33	18	122	
16 ♀	85	36	22	12	10	26	42	23	160	
17 ♀	84	32	20	13	10	24	34	15	70	regen.
18 ♀	82	30	20	13	11	26	37	19	116	
19 ♀	83	32	20	14	11	26	40	22	162	
20 ♀	70	27	18	14	9	22	32	16	103	

Explanation of the columns:

1.) From end of snout to vent. 2.) From end of snout to fore limb. 3.) Length of head. 4.) Width of head. 5.) Depth of head. 6.) Fore limb. 7.) Hind limb. 8.) Foot. 9.) Tail.

Limits of measurements:

1.	70 — 98	4.	12 — 18	7.	32 — 42
2.	27 — 37	5.	9 — 14	8.	15 — 23
3.	18 — 24	6.	22 — 29	9.	62 — 162

Pholidosis: (Compare with the table given below) The number and arrangement of postnasals and frenals are variable. Out of 20 cases only one (Coll. No. 14) has a single postnasal on both sides and 2 (Coll. No. 5 and 10) have single postnasals on the right side, all the rest possessing 2 superposed postnasals. Frenals are absent in 6 cases, 1 in 5, 2 superposed in 8, in one specimen (Coll. No. 18) exceptionlly it is 3. Superciliaries 5 (rarely 4 or 6). BOULENGER states that sometimes they are reduced to 2 or 3. In one specimen (Coll. No. 20) 7 granules between supraoculars and superciliaries. (Generally no such granules). 5 anterior upper labials in 2 specimens. (Usually it is 4). 40-48 (in one case only 37) scales across the middle of body (40-49 according to BOULENGER). Ventralia 6 in longitudinal rows (BOULENGER states that they may be 8 also, but then the outer plates are usually very narrow). Femoral pores 12-18, in one case (Coll. No. 9) only 10 on the left side. Preanal plate surrounded by 2 semicircles in all 20 specimens, but the number of plate like large scales in front of the preanale variable: no such a scale or scales in 4 cases, a single plate in 5 cases, double in 11 cases. A detailed analysis relating to pholidosis characters of our specimens is given in the following table:

Coll. No. and sex of specim.	1	2	3	4	5	6	7	8
1 ♂	43	29		18	14-13	16	2	0
2 ♀	42	30	11	17	14	18	2	0
3 ♀	42	29	11	19	14	17	2	0
4 ♀	47	30	10	18	13-14	20	2	2
5 ♂	43	29	11	17	15-14	19	1-2	2
6 ♂	41	28	11	16	12	21	2	1
7 ♀	44	31		18	12	20	2	2
8 ♂	46	28	10	16	15-13	20	2	2
9 ♀	42		9	18	12-10	21	2	0
10 ♀	48	29	12	22	15-14	18	1-2	2
11 ♂	45	30	9	21	12-13	19	2	0
12 ♂	42	26	9	19	16-17	18	2	1
13 ♂	44	27	11	16	13-15	20	2	0

Coll. No. and sex of specim.	1	2	3	4	5	6	7	8
14 ♂	46	27	10	19	15-14	18	1	1-2(*)
15 ♂	48	30	11	18	16-15	21	2	1
16 ♀	37	28	10	18	17-15	26	2	1
17 ♀	41	30	10	19	13	20	1-2	2
18 ♀	44	30	11	16	12	22	2	3
19 ♀	40	28	9	18	18-17	24	2	1
20 ♀	44	30	10	20	14	21	2	2

Colouration: Because of its variability according to sex and age I give a somewhat detailed account of the pattern of our specimens. They are all adult, 11 females and 9 males. Upper part grey-brown, in males a little greenish. On the dorsal part are 3 light longitudinal streaks, the median beginning behind th occipital shield and ending on the base of tail, the lateral generally from the fourth supraocular of from the hind part of the parietal shield and continuing to some extend on the tail. Between the dorsal streaks run a series of large squarish or irregular dark brown or black spots which in a few cases are (usually females), uninterrupted and run like 2 dark bands each on one side of the median light line. On the sides are irregular black or dark brown spots or points. In a few specimens light streaks or ocelli are found on the sides. Lower parts are uniform grey, in one case (Coll. No. 9) whitish.

Geographical distribution: South-eastern and Central Russia, in Europe east of the Dnieper, Transcaucasia and Armenia, Western Siberia and Central Asia eastwards to the Yenissei and the Altai and Tian Shan Mountains. Ascends the Caucasus to the altitude of 2000 metres.

Diagnostic characters: *L. agilis*: Granules between the supraoculars and the superciliaries usually absent; usually 2 large upper temporals; frontonasal usually between 6 shields; foot not longer than head; nostrils between 3 or 4 shields, the rostral not entering its border; dorsal scales elongate and strongly carinate; ventral plates in 6 (rarely 8)

(*) On the right side, upper postnasal and upper frenal are replaced by 6 granules.

Note: Where no number is given it is because counting was impossible owing to some artifiial defect in that region of the specimen.

Limits if numbers:

1. 37 — 48
2. 26 — 38
3. 9 — 11
4. 16 — 22
5. 12 — 18
6. 16 — 26
7. 1 — 2
8. 0 — 2 (3 in No. 18)

Explanation of the columns:

1) Number of scales across middle of body. 2) Transverse series of ventral plates. 3) Number of plates in collar. 4) Number of scales and granules between symphysis of chin shields and median collar plate. 5) Number of femoral pores (on right and left sides, if differing). 6) Number of subdigital lamellae under the fourth toe. 7) Number of postnasals (on right and left sides, if differing). 8) Number of frenals (on right and left side, if differing).

longitudinal rows; tail never twice the length of head and body; notches between the ventral plates; pterygoid teeth.

S. sp. exigua: Usually 2 postnasals; anterior loreals 1 or 2 absent: frontonasal usually as broad as the internarial space; 34-52 scales across the body, usually 40-49; Preanal plate usually rather small, bordered by two semicircles of scales, one or two of which in front of the plate, are often much enlarged and plate like; 10-20 femoral pores, usually 13-16; a light vertebral streak usually present.

Lacerta princeps Blanf. 1874.

Bibliography: G. A. Boulenger, Monogr. of Lacert., 1920; F. Bodenheimer, Introduc. Knowl. of Amph. Rept. Turkey, 1943.

Locality and Date: Hüseyni (Siirt) VIII. 1943.

No. and sex of specimens examined: 3 ♀.

Habit: As I understand from the account given by BOULENGER very little is known about this species which proves to be new also for Turkey. He gives the description of an adult female from near Shiraz in the British Museum comparing it with the type specimen, a female also, described by BLANFORD and preserved in the Calcutta Museum. The type was also obtained from S. Persia: near Niriz about 100 miles east of Shiraz. It is noted that *L. princeps* is more nearly related to *L. viridis* than to any other species.

I give below, measurements relating to body in comparison with those given by Boulenger:

Coll. No. and sex of specim	Measurements in millimetres 1	2	3	4	5	6	7	8	9
1 ♀	127	40	28	19	16	39	63	32	256
2 ♀	92	37	26	16	13	35	58	30	235
3 ♀	118	42	27	18	15	40	65	34	broken.
Boulenger's specimen ♀	133	45	30	19	17	45	69	38	250

Explanation of columns as in *L. agilis exigua.*

As seen above, BOULENGER's specimen must be a little larger than curs, but the proportions are quite in agreement. In Blngr.'s specimen the tail is a little less than twice the length of head and body, in ours it is a little more, like in the type. In Blngr.'s specimen, the hind limb does not quite reach the axil, in ours it just touches.

Pholidosis: The main points are tabulated below:

Coll. No. and sex of specim	1	2	3	4	5	6	7	8	9	10
1 ♀	36	32	10	8	20	17—19	26	4—3	2	1
2 ♀	33	31	10	9		16—18	27	2	2	1
3 ♀	34	32	10	9	18	17	27	2—3	2	1
Blngr.'s spec	37	31	10	9	20	13—15	26	4—3	2	1—2

Explanation of the columns:

1) Scales across the middle of body. 2) Transverse series of ventral plates. 3) Longitudinal series of ventral plates. 4) Plates in collar. 5) Gular scales in a straight line. 6) Femoral pores. 7) Subdigital lamellae under fourth toe. 8) Granules between supraoculars and superciliaries. 9) Postnasals. 10) Anterior loreals.

As we see in the table, number of scales around body is a little less in our specimens, in the type it is 34 which is also less than BOULENGER's. Contrarily, number of femoral pores in ours is a little more.

Other points of disagreement are: Superciliaries 4-5 (5-6 in Blngr.) Tympanic not distinct (distinct in Blngr.) scales sub-carinate on the nape (smooth in Blngr.) Scales carinate on the sides (smooth in Blngr.) The plates of outer rows of ventralia keeled in ours (no mention in Blngr.) Relative breadth of ventralia: Second series from the median broadest, those of the 3rd broader than the 4th rows', those of the 5th narrowest (in Blngr.'s: second series from the median broadest, those of the 3rd and 4th series equal, those of the 5th very small.)

Coloration:

Type specimen: «Olivaceaus grey above, whitish below; there are a few small black spots on the back and sides of the neck, and a row of three or four ocelli (those in front double) with black margins behind each shoulder, extending in a line for a short distance down each side; the sides of the head are bluish, a tint especially marked on the labials, throat yellow.»

Specimen in the British Museum: «pale brownish grey above, without spots on the neck; 3 ocellar spots on each side, the first and second with two superposed blue centers; posterior two thirds of tail reddish.

Our specimens: Grey-brown above, with irregularly scattered dark spots on the back and head and tail. Light ocelli over and behind the shoulders and on the hind tegs; lower parts uniformly grey (Coll. No. 3), light grey (Coll. No. 1) and whitish (Cill. No. 2); Underside of legs and tail yellowish white.

Geographical distribution: As far as it is recorded by BOULENGER only 3 localities are given for this species: 1) Niriz, where the type specimen was obtained, 2) Shiraz, where the specimen preserved in the British Museum was obtained, 3) Sarchun, where a young specimen (measuring 50 mm. from snout to vent) preserved in the Leningrad Museum was obtained. BOULENGER thinks it possible that a female specimen from Ankara, noticed by STEINDACHNER (1897) under the name of *L. viridis,* may belong to this species. Also BODENHEIMER writes that according to MERTENS a specimen taken near Mardin (WOLTER), under the name of *L. trilineata,* may prove to be *L. princeps* from S. Iran.

Now it is certain that the range of this species extends up to our country and saves it from being an isolated form which may be linked with *L. viridis* forms so common in Anatolia.

Diagnostic characters. Ventral plates smooth, with notches between, in 10 longitudinal series; dorsal scales rhombic, subimbricate, strongly keeled, much larger than the laterals; 34-37 scales across middle of body; Collar strongly serrated; Nostril pierced between 5 or 6 shields, the rostral nearly always entering its border; subdigital lamellae 21 to 31; usually 3 large upper temporals, the first in contact with the fourth supraocular; tail $1^2/_3$-$2^2/_5$ times the length of head and body; usually 2 superposed postnasals; subdigital lamellae smooth or tubercular; pterygoid teeth.

Eremias pleskei Bedr. 1907.

Bibliography: G. A. Boulenger, Monogr. of Lacert., 1920.

Locality and Date: Başköy (Iğdır), VIII. 1943.

No. and sex of specimens examined: 4♀.

This species is based on two specimens obtained from Nachitschewan in Transcaucasia and preserved in the Petrograd Museum. Later it has been identified with E. fasciata Blanf. But because of the wide separation betwen the two series of femoral pores BOULENGER finds it reasonable to provisionally maintain *E. pleskei* as distict. In my specimens also, though many characters coincide better with those of *E. fasciata* I prefer to name them as *E. pleskei* because of the following points which are in perfect agreement with the latter species: 1) The two series of femoral pores are widely separate. 2) The colouration and markings are exactly the same. 3) The locality is almost identical.

Habit and pholidosis: (In the following account the points which do not agree with those of *E. pleskei* but which are in accordance with those of *E. fasciata* are followed by an F. in brackets). Tail a little less than twice the length of head and body (F.) (a little more than twice the length of head and body, in E.P.). Frontale separated from supraoculare by a series of granular scales (F.) (frontale in contact with supraoculare, in E.P.). Two large supraoculars followed by a small band-like shield. (F.) (two large supraoculars bordered by granules in front and behind, and a small third, in E.p.). The particulars relating to measurements and pholidosis are respectively given in two tables below:

Coll. No. and sex of specim	Measurements in millimetres. 1	2	3	4	5	6	7	8	9
1 ♀	63	26	16	9	6	24	39	18	108
2 ♀	55	24	15	9	6	21	36	17	72 regenerated
3 ♀	55	23	16	9	6	20	36	15	broken
4 ♀	58	24	17	9	6	23	34	18	broken

Explanation of the columns as in L. a. exigua.

Coll. No. and sex of specim.	1	2	3	4	5	6	7	8	9
1 ♀		14	33	11	27	14—13	26	6	6
2 ♀	49	14	30	10	25	16—14	25	5	7
3 ♀	46	14	31	14	26	16—17	27	6	7
4 ♀	47	16	34	13	27		26	6	7

Explanation of the columns:

1) Scales across the middle of body. 2) Longitudinal series of ventral plates. 3) Transverse series of ventral plates. 4) Plates on the border of collar. 5) Gular scales in a straight line. 6) Femoral pores (right and left, if differing). 7) Lamellae under the 4th toe. 8) Upper labials anterior to center of eye. 9) Superciliaries.

Our specimens differ a little only from *E. fasciata* and *E. pleskei* in two characters. These are tabulated below:

Species	1	2
E. fasciata	16—19	28—30
E. pleskei	15—17	not given
Our specimens	13—17	25—27

Explanation of the columns:

1) Femoral pores. 2) Lamellae under the 4th toe.

Colouration: Pale brown above, with 4 light longitudinal steaks; limbs with light ocellar spots; lower parts yellowish white. It is noted by BOULENGER that the streaks may be 5 also, but in all our specimens it is 4.

Geographical distribution: The two type specimens were from Nachitschewan in Transcaucasia, the place where we obtained our specimens is a little west of that region.

Diagnostic characters: Femoral pores 15-17 on each side, the two series broadly separated in the middle, the space usually at least $^1/_3$ the length of each, very rarely $^1/_4$; 16-18 ventral plates in the longest transverse series; parietals as long as broad; 45-62 scales across middle of body 20-36 gular scales in a straight median series, usually 22-30; the first of the two large supraoculars longer than its distance from the second loreal; three nasals (exceptionally four), the lower in contact with the two or three anterior upper labials; subdigital lamellae keeled; occipitale absent; ventral plates in oblique longitudinal series converging posteriorly.

(Manuscript received December 8th, 1944)

Explanation of plate 1.

Fig. 1, 6. Lacerta agilis exigua Eichw.

Fig. 2, 3. Lacerta princeps Blanf.

Fig. 4, 5. Eremias pleskei Bedr.

(for details compare the text.)


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