

REDISCOVERY OF *Darevskia steineri* (EISELT, 1995) (SAURIA: LACERTIDAE) FROM IRAN

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Based on extensive field work in various regions of Golestan Province, northeastern Iran, the Steiner, s lacertid lizard, *Darevskia steineri* (Eiselt, 1995) is re-discovered. After Eiselt, s record and description (based on museum material), this is for the first time that *Darevskia steineri* is observed and reported from Iran.

Keywords: Lacertidae; *Darevskia steineri*; rediscovery; Golestan Province; Northeastern Iran.

The genus *Darevskia* Arribas 1997, belonging to the tribe Lacertini, mainly occurring in the Caucasus region, eastern Turkey and northern Iran. Of more than 27 recognized species, about seven taxa occur in northern, northwestern and northeastern regions of the Iranian Plateau. One of these species is *Darevskia steineri* (Eiselt, 1995) occurring in northeastern Iran in Golestan province.

Since 1995, when Eiselt, based on museum material, first described *Darevskia steineri* (= the formerly *Lacerta steineri*), there is no report of occurrence of this lizard in

Iran. During field work in Golestan Province, northeastern Iran, we observed several specimens of *Darevskia steineri* (Eiselt, 1995) from the Loweh waterfall, at an altitude of 655 m (2150 ft) (37°20'53" N 55°40'28" E) on August 15, 2011. We just collected one of the observed specimens. This single specimen is now deposited at Sabzevar University Herpetological Collection (SUHC) with the museum number: SUHC-ERP-1029 (Fig. 2). The species of *Darevskia* in Iran are mainly rock-dweller. However, *Darevskia chlogaster* (Boulenger, 1909) is often associated with fallen and standing timber (Anderson, 1999; Rastegar-Pouyani et al., 2007), while *Darevskia praticola* is mainly a ground-dweller, often in and

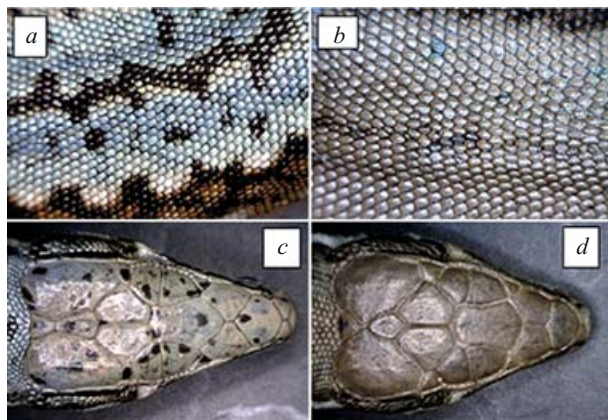


Fig. 1. Dorsal scales of *D. steineri* (smooth) (a); dorsal scales of *D. chlogaster* (keeled) (b); top of the head in *D. steineri* (c); top of the head in *D. chlogaster* (d).



Fig. 2. *Darevskia steineri* in natural habitat. Note the vertebral dark strip.

TABLE 1. The Comparison of Five Iranian Species of *Darevskia*

Characters	<i>Darevskia raddei</i> (n = 5)	<i>Darevskia valentini</i> (n = 3)	<i>Darevskia chlorogaster</i> (n = 3)	<i>Darevskia praticola</i> (n = 2)	<i>Darevskia steineri</i> (ERP 1029)
Nasals	2	2	2	2	2
Postnasals	1	1	1	1	1
Supralabials	6 – 8	7 – 8	7 – 8	8	7
Inferalabials	6 – 7	5 – 6	6 – 7	6 – 7	6
Supraciliaries	6 – 7	6	6	6	6
Gulars	25 – 28	27 – 31	20 – 21	19 – 20	24
Collars	9 – 10	9 – 11	7 – 8	7	10
Dorsals	48 – 57	50 – 54	39 – 48	47 – 49	58
Ventral rows (vertically)	8	8	6	6	6
Ventral rows (horizontally)	25 – 28	28 – 30	25 – 27	25	26
Subdigital lamella 4 th toe	22 – 31	18 – 26	25 – 28	25 – 27	30
Scales around 4 th toe	3	3	3	2	3
Femoral pores	17 – 20	16 – 21	17 – 19	15	18
Number of scales between femoral pores	3 – 4	3 – 5	2 – 3	0	4
Scales in 9 th segment tail	19 – 22	22 – 24	20 – 22	21 – 22	22
Snout-vent length, mm	53.15	63.35	55.60	62	59.92
Tail length, mm	84.34	95.29	83.14	134.43	97.70
Length of head, mm	11.97	13.90	13.29	12.32	15.27
Length of 4 th toe, mm	10.10	9.84	10.91	9.50	12.85
Interlimb length, mm	24.18	27.91	25.51	28.37	24.89
Height of head, mm	5.73	7.12	6.70	7.50	6.46
Width of head, mm	8.42	10.57	8.98	10.18	9.14
Length of forelimb, mm	18.72	19.92	20.00	23.50	24.17
Length of hindlimb, mm	28.67	29.45	33.42	32.16	35.50
Length of eye, mm	2.77	3.50	2.79	3.15	2.98

around herbaceous vegetation (Arnold, 2007), the other species are exclusively montane such as: *Darevskia defilippi*, *Darevskia raddei*, and *Darevskia valentini*. Among the species of *Darevskia* in Iran, and based on this study, *Darevskia steineri* occurs in different habitats: around the timbers and also on the ground. On the other hand, it also occurs on the rocks near a waterfall where it is sympatric with *Darevskia chlorogaster* and *Gloydus halys* (Crotalidae).

In 1995, Eiselt described *Darevskia steineri* based on examining of eight specimens (one holotype: NMW 33715 and seven paratypes: NMW 33716:1 – 7), deposited at the Vienna Natural History Museum (NMW) (Austria), collected by H. Steiner on 13.8. 1968 from Gole-Loweh around Minou-Dasht, southeast of Gonbad-e-Ghabous, northeastern Iran (Eiselt, 1995: 63). The longitude and latitude given by Eiselt (1995: 63) (33°11' N 35°21' E) are obviously incorrect since this is significantly far from the type locality given by him. As mentioned above, we collected this lizard at (37°20'53" N 55°40'28" E) that is quite far from the Eiselt address. At that time, Eiselt named this new taxon

as *Lacerta (Archaeolacerta) steineri* (Eiselt, 1995: 63). In 1997, Arribas based on the study of morphology and anatomy proposed a new generic name, *Darevskia*, for a distinct group of small-sized taxa of lacertids (previously belonging to the inclusive genus *Lacerta*). The Eiselt, s *Lacerta (Archaeolacerta) steineri* then came under the new generic name “*Darevskia*” Arribas, 1997.

Arnold et al. (2007) while confirming the status of new generic name (*Darevskia*) proposed by Arribas (1997), divided the inclusive genus *Lacerta* into 19 monophyletic genera, one of which is *Darevskia*. In Iran, *Darevskia* encompass species such as: *Darevskia raddei*, *Darevskia chlorogaster*, *Darevskia valentini*, *Darevskia defilippi*, *Darevskia praticola*, *Darevskia steineri*, and the highly questionable *D. mostoufii*.

Fieldwork was conducted during August 2011 on the Hyrcanian forests of northeastern Iran in Golestan Province. Thereby, several doubtful lacertids were collected from the area. Specimens were transferred to the laboratory and were carefully checked with the reliable morphological keys (Anderson, 1999; Rastegar-Pouyani et al., 2007). Based on the keys, the collected specimens were belonging to two distinct taxa: *Darevskia chloro-*



Fig. 3. Habitat of *D. steineri*, the second Loweh waterfall, Golestan Province, northeastern Iran.

gaster (Boulenger, 1909) and *Darevskia steineri* (Eiselt, 1995). These two taxa are distinguishable based on several species-specific characters (Fig. 1 and Table 1): in *D. chlorogaster* the dorsal scales are keeled but in *D. steineri* the dorsals are smooth. As well, they are different based on color pattern and details of head and body scalation (Fig. 2 and Table 1). As well, *Darevskia steineri* is different from the other Iranian species of *Darevskia* (e.g., *D. chlorogaster*, *D. defilippi*, *D. valentini*, and *D. praticola*) based on details of metric and meristic characters (Table 1).

Habitat of *D. steineri* is located in a mesic and sultry area in the Hyrcanian forests in the second Loweh waterfall, Golestan Province, northeastern Iran. The habitat is covered with perennial, biennial and herbaceous Hyrcanian vegetation (Figs. 3 and 4). Based on our observations, *D. steineri* climbs up the trees and keeps itself secret in the tree's incisions. In the same locality, we found two specimens of *Gloydus halys* (Crotalidae) while mating in the split of a tree.

Further investigation and collecting more material from the areas of distribution would shed more light on taxonomy and distribution of the Steiner, s lizard.

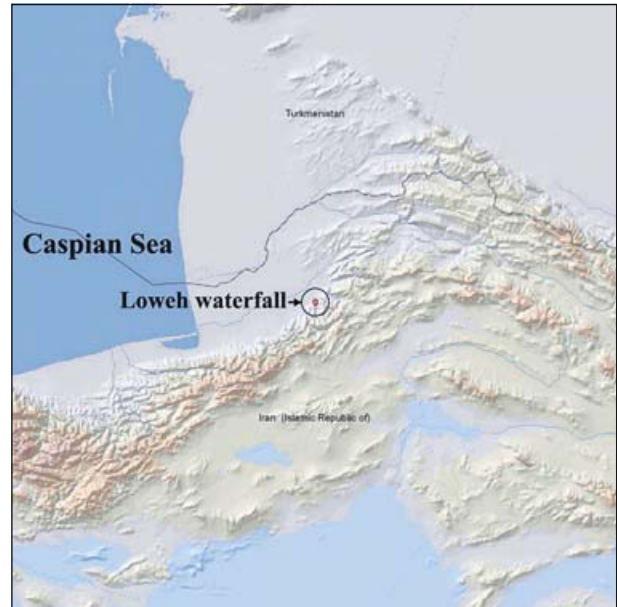


Fig. 4. Distribution map of *D. steineri* in Golestan Province, northeastern Iran.

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REFERENCES

- Anderson S. C.** (1999), *The Lizards of Iran. Society for the Study of Amphibians and Reptiles*, Oxford (Ohio).
- Arnold E. N., Arribas O., and Carranza S.** (2007), "Systematics of the Palaearctic and Oriental lizard tribe Lacertini (Squamata: Lacertidae: Lacertinae), with descriptions of eight new genera," *Zootaxa*, **1430**, 3 – 86.
- Eiselt J.** (1995), "Ein Beitrag zur Kenntnis der Archaeolacerten (sensu M ehely, 1909) des Iran (Squamata: Sauria: Lacertidae)," *Herpetozoa*, **8**(1 – 2), 59 – 72.
- Rastegar-Pouyani N., Johari M., and Rastegar-Pouyani E.** (2007), *Field Guide to the Reptiles of Iran. Vol. 1. Lizards*, Razi Univ. Press.