

## NEW RECORDS OF TWO LACERTID SPECIES AND THE CONFIRMATION OF THE OCCURRENCE OF *Anguis fragilis* L. 1758 FROM ANKARA PROVINCE

Bayram GÖÇMEN<sup>1,\*</sup>, M. Anıl OĞUZ<sup>1</sup>,  
Mert KARIŞ<sup>1</sup> and C. Mehmet KÖSEMEN<sup>2</sup>

1. Ege University, Faculty of Science, Department of Biology, Zoology Section, 35100,  
Bornova-İzmir, Turkey.

2. Süleyman Seba avenue, No:11 Sıraevler 34353, Akaretler, Beşiktaş-İstanbul, Turkey.

\*Corresponding author, B. Göçmen, E-mail: cypriensis@yahoo.com

Tel: +90 (232) 311 17 95, Fax: +90 (232) 388 10 36

**ABSTRACT.** During fieldwork excursions on June and September 2015 we obtained new distributional records for three lizard species. Here, we present the first record of *Darevskia rudis tristis* and *Lacerta viridis meridionalis* from Turkey's Ankara province and confirm the occurrence of *Anguis fragilis* in this locality.

**KEY WORDS:** *Lacertidae*, *Anguidae*, *Darevskia rudis*, *Lacerta viridis*, *Anguis fragilis*, distribution, Turkey.

The lizards that belong to genus *Darevskia* have a wide distribution from south-eastern Europe to the Caucasus and Crimea, including Anatolia and Iran (Lantz & Cyrén 1936, Franzen 1990, Arribas et al. 2013). They are abundant in Anatolia, especially in the western, central and eastern parts of the Black Sea Region (Bodenheimer 1944, Budak & Böhme 1978). In June 2015, during a field trip in Ankara (Işık Mountain/Kızılcahamam), we encountered two male and two female specimens of *Darevskia rudis*. After morphological examination and comparison with current literature, we concluded that they belong to the subspecies *Darevskia rudis tristis* (Lantz & Cyrén 1936). Neither Sindaco et al. (2000) nor any other study shows the distribution of *D. r. tristis* reaching to this locality (Figure 1). Hence, our findings constitute the first records of *Darevskia rudis tristis* from Ankara

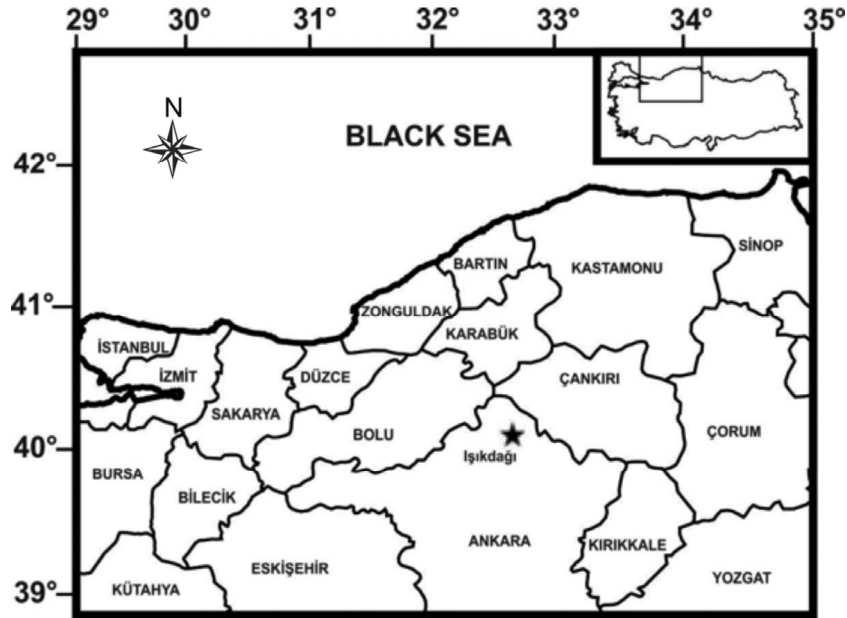


Figure 1. The Işıkdagi / Kızılcahamam region, where the specimens were found, is indicated with the star, in Turkey's Ankara province.

province. The specimens' scale characters agree with Lantz & Cyrén (1936) as well. Some scale characters are provided in Table 1 and photographs of male and female specimens are presented in Figure 2. A photograph of the lizards' biotope is also provided in Figure 3.

*Lacerta viridis* has a wide distribution in Turkey, especially in Thrace, north and northwest Anatolia. *Lacerta viridis meridionalis* is known to occur in Thrace and *L. v. paphlogonica* the central Black Sea Region, whereas *L. v. infrapunctata* inhabits the eastern Black Sea region (Bodenheimer 1944, Chondropoulos 1986, Schmidtler 198, Mulder 1995, Çevik 1999). Mitochondrial genome studies by Marzahn et al. (2016) showed that *L. v. paphlogonica* and ssp. *infrapunctata* were synonyms of *L. v. meridionalis*. During our fieldwork in Ankara (Işıkdagi/Kızılcahamam), we found two male and two female specimens of *Lacerta viridis*. After the examination of morphological details, scale arrangement and photographs, we concluded

that our specimens relate to *L. v. meridionalis*, in agreement with Cyrén (1933) and Schmidtler (1986) (Figure 2, Table2).

Table 1. Some scale characters of *Darevskia rudis tristis* from Ankara province (Işıkdağı/Kızılcahamam).

	Male 1	Male 2	Female 1	Female 2
Snout-Vent Length	67.16 mm	64.07 mm	65.51 mm	64.63 mm
Pileus Length	16.35 mm	14.82 mm	14.76 mm	15.30 mm
Head Length	23.21 mm	22.49 mm	21.49 mm	21.70 mm
Head Width	11.34 mm	10.44 mm	8.28 mm	9.18 mm
Supraciliaria	6	7	7	6
Collaria	9	10	7	9
Gularia	27	33	30	30
Dorsalia	49	48	48	49
Ventralia	26	26	32	30
Femoralia	20	20	18	18
Preanalia	2	2	1	1
Circumanalia	7	7	7	7

Table 2. Some pholidosis characters of *Lacerta viridis meridionalis* from Ankara province (Işık Mountain/Kızılcahamam).

	Male 1	Male 2	Female 1	Female 2
Snout-Vent Length	86.73 mm	91.80 mm	95.43 mm	93.50 mm
Tail Length	138.64 mm	140.02 mm	168.76 mm	87.18 mm
Postnasale	2	2	2	2
Preocularia	1	1	1	1
Supralabialia	5	6	6	6
Supraciliaria	6	5	4	5
Supratemporalia	2	2	2	2
Inframaxillaria	5	5	5	6
Collaria	8	8	9	8
Gularia	23	24	20	19
Dorsalia	54	50	46	44
Ventralia	28	28	30	32
Femoralia	15	16	15	14

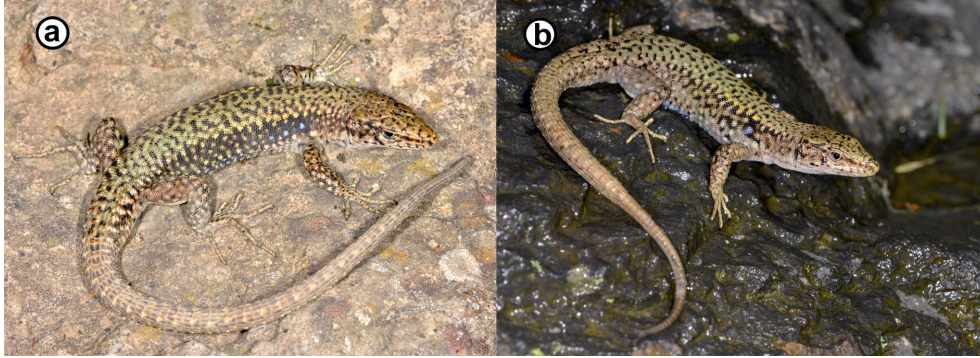


Figure 2. Photos of a male and a female *Darevskia rudis tristis* from Ankara (Işıkdağı/Kızılcahamam) province (a: Male, b: Female).



Figure 3. A view from the biotope we found the three species in Işıkdağı.

With its vast distribution range from central Europe to the north of Iran, including Anatolia and Caucasia, *Anguis fragilis* is one of the most abundant species among lizards (Ananjeva 2006). Baran & Atatür (1980) mentioned the existence of *Anguis fragilis* in Ankara; but there had been no material evidence such as a museum specimen or a photographic record. During our fieldwork, we found one specimen in Ankara (Işık

Mountain/Kızılcahamam) (Figure 5). Consequently, we confirmed the existence of *Anguis fragilis* in Ankara province.



Figure 4. A male with the green colour pattern and a female with brown colour pattern *Lacerta viridis meridionalis* from Ankara (Işıkdağı/Kızılcahamam) province.



Figure 5. Photo of *Anguis fragilis* from Ankara (Işıkdağı/Kızılcahamam) province.

A photograph of Schneider's Skink, *Eumeces schneiderii* (Daudin, 1802) was recently taken in Ankara province and posted on the website "www.turkherptil.org" (The Amphibian and Reptile Monitoring and Photography Society in Turkey). Its range extends from North Africa, Anatolia, Cyprus Island to West and Central Asia. Although it has a wide distribution in Turkey, it was not known from Ankara province (Atatür & Göçmen 2001, Yalçinkaya 2013). This photographic record represents the first record for this taxon from Ankara province.

**ACKNOWLEDGEMENTS.** We express our gratitude to Dr. Konrad Mebert for his review of an earlier version of the manuscript.

#### References

- Ananjeva, N.B. (2006): The reptiles of Northern Eurasia: taxonomic diversity, distribution, conservation status. Pensoft Publishers, No. 47.
- Arribas, O., Ilgaz, Ç., Kumlutaş, Y., Durmuş, H.S., Avcı, A., Üzüm, N. (2013): External morphology and osteology of *Darevskia rudis* (Bedriaga, 1886), with a taxonomic revision of the Pontic and Small-Caucasus populations (Squamata: Lacertidae). *Zootaxa* 3626(4): 401-428.
- Atatür, M.K., Göçmen, B. (2001): Kuzey Kıbrıs' ın Kurbağa ve Sürüngenleri Amphibians and Reptiles of Northern Cyprus. *Ege Üniversitesi Fen Fakültesi Kitaplar Serisi*, No. 170, Bornova-İzmir.
- Baran, İ., Atatür, M.K. (1980): Türkiye Sürüngenleri Kısım I. Kaplumbağa ve Kertenkeleler. *Ege Üniversitesi Fen Fakültesi Kitaplar Serisi*, No. 76, Bornova-İzmir.
- Bodenheimer, F.S. (1944): Introduction into the knowledge of the Amphibia and Reptilia of Turkey. *Review of the Faculty of Science, University of Istanbul, Series B* 9: 1-78.
- Budak, A., Böhme, W. (1978): Über die rudis-Gruppe des *Lacerta saxicola*-Komplexes in der Türkei, I (Reptilia: Sauria: Lacertidae). *Annalen des Naturhistorischen Museums in Wien* 81: 273-287.
- Chondropoulos, B.P. (1986): A Checklist of the Greek Reptiles I. the Lizards. *Amphibia-Reptilia* 7: 217-235.
- Cyrén, O. (1933): Description *Lacerta viridis meridionalis* Lacertiden der Südöstlichen Balkanhalbinsel. *Mitteilungen aus den Königlichen Naturwissenschaftlichen Instituten in Sofia* 5: 219-240.

- Çevik, I.E. (1999): Trakya'da Yasayan Kertenkele Türlerinin Taksonomik Durumu (Lacertilia: Anguidae, Lacertidae, Scincidae). Turkish Journal of Zoology 23: 23-35.
- Franzen, M. (1990): Die Eidechsenfauna (Lacertidae) der Türkei. Die Eidechse Heft, 1:3-9.
- Lantz, L.A., Cyrén, O. (1936): Contribution a la connaissance de *Lacerta saxicola* Eversmann. Bulletin de la Société Zoologique de France Séance du 24 Mars: 159-181.
- Marzahn, E., Mayer, W., Joger, U., Ilgaz, Ç., Jablonski, D., Kindler, C., Žagar, A. (2016): Phylogeography of the *Lacerta viridis* complex: mitochondrial and nuclear markers provide taxonomic insights. Journal of Zoological Systematics and Evolutionary Research 54(2): 85-105.
- Mulder, J. (1995): Herpetological Observations in Turkey. Deinsea 2: 51-66.
- Schmidtler, J.F. (1986): Orientalische Smaragdeidechsen. I: Zur Systematik und Verbreitung von *Lacerta viridis* in der Türkei (Sauria: Lacertidae). Salamandra 22(1): 29-46.
- Sindaco, R., Venchi, A., Carpaneto, G.M., Bologna, M.A. (2000): The reptiles of Anatolia: a checklist and zoogeographical analysis. Biogeographia 21: 441-554.
- Yalçinkaya, D. (2013): Anadolu ve Kıbrıs'ta Dağılışı Gösteren *Eumeces schneiderii* Daudin, 1802 (Sauria: Scincidae) Populasyonlarının Taksonomisi ve Biyolojisi. PhD Thesis, Ege University, 127pp.