

**A new record of *Eremias strauchi strauchi* Kessler, 1878 (Sauria: Lacertidae)
from Kurdistan Province, Western Iran**

BAHMANI, Z.¹, N. RASTEGAR-POUYANI^{2*} E. RASTEGAR-POUYANI³ AND A. GHARRZI¹

¹*Department of Biology, Faculty of Science, Lorestan University, Khoramabad, IRAN*

²*Department of Biology, Faculty of Science, Razi University, Kermanshah, IRAN*

³*Department of Biology, Faculty of Science Hakim Sabzevari University, IRAN*

E-mail: nasrullah.r@gmail.com

ABSTRACT

During field work in western regions of the Iranian Plateau in the Zagros Mountains in September 2010, a single specimen belonging to the genus and subgenus *Eremias* Fitzinger, 1834 was collected from the protected area of Bijar (at about 1619 m elevation) in north of the city of Bijar, Kurdistan Province, western Iran (47° 34' E; 36° 00' N).

Key words: Lacertidae, *Eremias (Eremias) strauchi strauchi*, new record, Bijar, Kurdistan Province, western Iran.

INTRODUCTION

The lacertid lizards of the genus *Eremias* Fitzinger, 1834, encompass about 37 species of mostly sand, steppe, and desert-dwelling lizards which are distributed from northern China, Mongolia, Korea, Central and southwest Asia to southeastern Europe (Rastegar-Pouyani and Nilson, 1997; Anderson, 1999). The genus *Eremias* is Central Asian in its relationships and affinities (Szczerbak, 1974). About 18

species of this genus occur on the Iranian Plateau, mostly in northern, central, and eastern regions (Rastegar-Pouyani and Nilson, 1997; Rastegar-Pouyani and Rastegar-Pouyani 2001; Anderson, 1999). In Iran, the Strauch racerunner is represented by two subspecies, *Eremias strauchi strauchi* Kessler, 1878 and *Eremias strauchi kopetdaghica* Szczerbak, 1972 (Firouz, 2000). *Eremias strauchi strauchi*, is distributed in northwest of Iran, extending into Armenian Plateau of Azerbaijan and Armenia (to about 3500 m) and northeast of Turkey (Franzen and Heckes, 1999; Leviton et al., 1992; Tadevosyan, 2006). The second subspecies is found in northeast of Iran, Khorasan and Golestan provinces (Khademi, 2005).

So far, there are no further records of occurrence of *Eremias (Eremias) strauchi struchi* in region of the Zagros Mountains, including Kurdistan Province, which is located on the western periphery of the Iranian Plateau, bordered by Iraq in the west (Fig. 1).

In this paper, we report the Staruch racerunner from the Bijar Protected Area, northeastern regions of Kurdistan Province.

Material and Methods

During field work in September 2010, a single specimen of a lizard belonging to the lacertid genus *Eremias* Fitzinger, 1834 was collected from the protected area of Bijar in northeast regions of Kurdistan Province, about 20 km north of the Bijar city near the Salvat abad village (47°, 34' E; 36°, 00' N; 1619 m).

All the important meretic and meristic characters in identification of lacertid lizards were employed to specify taxonomic status of this lizard. In addition, two mitochondrial genes (12S ribosomal RNA and cytochrome b) were sequenced and compared to all other Iranian species of the genus *Eremias*. The collected specimen was fixed using 96% ethanol and kept in 75% alcohol in good condition.

Results

All the measurements, pholidotic characters, patterns and comparing the sequences of the mitochondrial genes clearly showed that the collected specimen belongs to *Eremias strauchi strauchi* (p- distance of less than 1% in cyt b gene) It was active during the daytime, foraging on rocks and in rock crevices as well as under bushes. The habitat is an upland area, characterized by steppe vegetation, being covered with snow from late November until late March (in the snowy years) (Fig. 2).

Measurements in millimeters (mm) and pholidotic characters, as well as color pattern of the collected specimen, are as follows:

Snout-vent length (SLV):45.60mm, tail length (TL):44mm. head length:17.67mm, head width :8,07mm; head height:7.16mm ,5 pairs of Submaxillary Shield, Scales nasal in contact with 3 scales upper lip, 30 gulars scales, 59-60 scales around widest Part of dorsum, 16 rows scales in the middle of ventral, 29-30 scales around the tenth ring tail, Occipital shield absent, Scales frontal and above the eye separated by two large scales and one small scale, 4 or 5 gulars Scales were influential between Submaxillary shield pairs (pairs two and three). Total Collar scales significantly larger than the gular scales.

Coloration:

Common ground color is olive gray. There are two prominent dorsolateral dark stripes on each side of back with dark- margined ocelli continuing onto the neck and onto anterior part of tail (Fig.1). White lines transform into rows of spots in adults. In adults the vertebral area is uniform without stripe or spots. The collected specimen is preserved in 75% alcohol and is deposited at the collection of the Razi University Zoological Museum (RUZM-LE 51.2)(Fig. 3).

DISCUSSION

According to Anderson (1999) and others (e.g., Hillmann, 2003) distribution of *Eremias strauchi strauchi* in Iran has been limited to small areas in central part of Azerbaijan provinces. More recently, (Rastegar-Pouyani et. al. 2007 and Ahmadzadeh et al. 2006) reported the range expansion of this subspecies into eastern Azerbaijan and eastern Ardabil provinces. The present record is the southernmost population of *Eremias strauchi strauchi* at about 200 Km far from the previous records in West Azerbaijan province around Maragheh city.

Our specimen was collected within a protected area located about 20 km north of the city of Bijar. The area is characterized by steppe vegetation providing food and shelter for various taxa of lizards. More study throughout Kurdistan province and collecting more material could shed more light on various aspects of biology and natural history of *Eremias strauchi strauchi*.

ACKNOWLEDGMENTS

We would like to thank Taher Soltani and Rasoul Karamiani for their kind cooperation during field work in western Iran. Also, we thank late Mahmoud Ahmadinejad, Vaisi, Payman Dibanjad from the Department of the Environment of Kurdistan for supporting us during the survey.

REFERENCES

AHMADZADEH, F., KAMI, H.G., HOJJATI, V. AND REZAZADEH, E. 2009 .
Contribution to the knowledge of *Eremias strauchi strauchi* Kessler, 1878
(Sauria:Lacertidae) from northwestern Iran. Iranian Journal of Animal
Biosystematics (IJAB) Vol.5, No.1, 17-24.

- ANDERSON, S. C. 1999. The Lizards of Iran. Society for the Study of Amphibians and Reptiles. Contributions to Herpetology **15**:1-442.
- FIROUZ, E. 2000. A Guide to the Fauna of Iran. Iran University Press, Tehran, Iran.
- FRANZEN, M. AND HECKES, U. 1999. *Eremias suphani* Basoglu & Hellmich, 1968 und *Eremias strauchi* Kessler, 1878 in der stlichen Türkei: Diagnostische Merkmale, Verbreitung und Lebensräume (Sauria: Lacertidae). Salamandera, **35**: 255-266.
- HILLMANN, B. 2003. Herpetologische Eindrücke aus dem Iran. Elaphe, **11**: 61-71.
- KHADEMI, A. 2005. Biosystematic of Neyshabour lizards (in Persian). M. Sc. Thesis, Shahid Beheshti University of Tehran, Tehran, Iran.
- LEVITON, A. E., ANDERSON S. C., ADLER K. A. AND MINTON S. A. 1992. Hand- book to Middle East Amphibians and Reptiles, Oxford, Ohio.
- RASTEGAR- POUYANI, N., JOHARI, M., AND RASTEGAR- POUYANI, E. 2007. Field Guide to the Reptiles of Iran. Volume 1: Lizards. Second edition. Iran, Razi University Publishing. 296 p. (In Farsi).
- RASTEGAR- POUYANI, N. AND NILSON, N. 1997. A new species of *Eremias* (Sauria: Lacertidae) from Fars Province, South-Central Iran. Russian Journal of Herpetology **4(2)**:94-101.
- RASTEGAR- POUYANI, N. AND RASTEGAR-POUYANI, E. 2001. A new species of *Eremias* (Sauria: Lacertidae) from highlands of Kermanshah Province, western Iran. AsiaticHerpetological Research **9**:107-112.
- SZCZERBAK, N. N. 1994. *Yaschurki Paelearctiki [The Palearctic Desert Lizards]*. Akadeimya Nauk Ukrainskoi SSR Institut Zoologii. Naukova Dumka, Kiev, Ukraine. 92 photos, 296 p. (In Russian).

TADEVOSYAN, T. L. 2006. Habitat suitability for reptiles in the Goravan Sands Sanctuary, Armenia. *Herpetological Conservation and Biology*, 1: 39-44.
