

Some remarks on the distribution and habitat preferences of the *Eremias strauchi kopetdaghica* Szczerbak, 1972 (Sauria: Lacertidae) from the northeastern Iranian Plateau

Seyyed Saeed Hosseinian Yousefkhani^{1*}, Masoud Yousefi², Eskandar Rastegar Pouyani^{1,3} and Ali Khani⁴

The known distribution of the poorly known subspecies *Eremias strauchi kopetdaghica* Szczerbak, 1972 is restricted to the northeastern part of the Iranian plateau. Approximately 70 days of fieldwork was conducted in Khorasan province during 2010-2012, resulting in the identification of some new distribution records. Therefore, we hereby update the distribution map for *Eremias strauchi kopetdaghica* in Iran (Fig. 1).

The genus *Eremias* has about 15 species in Iran (Rastegar-Pouyani et. al., 2008), one of them is *Eremias strauchi* that occurs with two distinct subspecies: *E.s.strauchi* and *E.s.kopetdaghica*; the former taxon is distributed in the northwestern region of the plateau and the latter in the northeastern region (Schammakov, Ataev and Rustamov, 1993; Anderson, 1999; Rastegar-Pouyani et. al., 2007). The Kopet Dagh Mountains, located on the northeastern edge of the Iranian Plateau, separate the central part of the plateau from the Turkmenistan desert. The region of Kopet Dagh consists on a mountain ranges that goes from the northwest to the southeast of the northern part of the Khorasan province and extends from Golestan Province (Maraveh Tappeh) to Khorasan Razavi Province (Bazangan) (Alaee, 2009).

During an expedition to this area in September 2011 and April 2012, 5 specimens of *E. s. kopetdaghica* (Fig. 2) were collected, preserved, cataloged and deposited in the Sabzevar University Herpetological Collection. Some specimens from the Rivand and Koohsorkh protected areas were only observed and not collected

therefore do not bear the catalog numbers (Table 1). Rivand is a protected area of about 75108 hectares and its elevation ranges between 946 and 2858 m above the sea level; while Koohsorkh is a protected area of about 47000 hectares that is located about 5 km North of Kashmar.

Earlier studies have revealed the presence of *E.s.kopetdaghica* in submontane regions with rocky habitat and *Astragalus* spp. shrubs, especially in Khorasan Razavi (Bazangan in Fig. 1) Province (Anderson, 1999).

In this study we provide a comparison of the preferred habitat of *E.s. kopetdaghica* at two different localities viz., Quchan and Kashmar (Fig. 1; 3). The two localities have markedly different habitats. The first site is a hilly area covered with rocks and with *Astragalus* spp. shrubs (Fig. 3A). The second locality is a submontane area near Kashmar. This area is covered with poor vegetation, the temperature in summer is higher than in the first locality and the dominant vegetation includes *Artemisia* spp. The locality in figure 3A (Quchan) is on the road from Neyshabour to Quchan, while the locality in figure 3B (Kashmar) is near Koohsorkh in Khorasan province. This locality shows the typical foothills in Kopet Dagh territory.

All other records of *Eremias strauchi kopetdaghica* from Khorasan province collected during this study are presented in Table 1 and in figure 1.

Laudakia caucasia and *Ablepharus panonicus* are other sympatric species found with *Eremias strauchi kopetdaghica* at the same locality.

1 Iranian Plateau Herpetology Research Group (IPHRG), Faculty of Science, Razi University, 6714967346 Kermanshah, Iran

2 University of Tehran, College of Agriculture & Natural Resources, Faculty of Natural Resources, Department of Environment, Iran

3 Department of Biology, Faculty of Science, Hakim Sabzevari University, Sabzevar, Iran

4 Department of Environment, Khorasan Razavi, Sabzevar, Iran.

Corresponding author Email: mesalina.watsonana@gmail.com

Acknowledgements. We thank to Mohammad Arab, Aghil Keyvanloo and Hamzeh Oraei with special association in field works. Some parts of this study were conducted by Department of Environmental of Khorasan Razavi. Our special thank go out to Joseph R. Mendelson, Raul Diaz and Rafaqat Masroor to review the paper as English.

Abbreviation. Sabzevar University Herpetological Collection (SUHC); Department of the Natural Environment Zoological Museum, University of Tehran (NEZMUT).

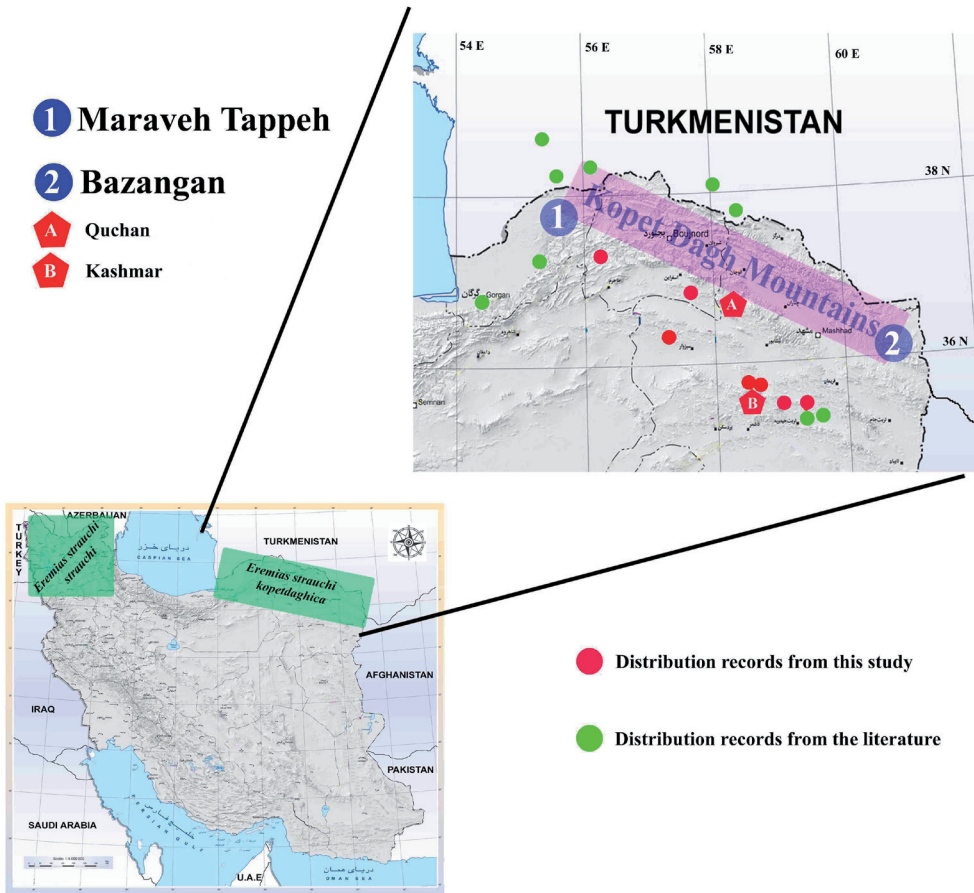


Figure 1. Map of Iran showing the study sites in Khorasan province. Red circles refer to new distributional records and green circles refer to historical records reported in the literatures.

References

Alaee, M. (2009): Geomorphology of Iran. Ghoomes Publication company. 360 pp.

Anderson, S.C. (1999): The Lizards of Iran. Oxford, Society for the Study of Amphibians and Reptiles.

Rastegar-Pouyani, N., Kami, H.G., Rajabizadeh, M., Shafiei, S., Anderson, S. C. (2008): Annotated checklist of amphibians and reptiles of Iran. Iranian Journal of Animal Biosystematics 4: 43-66.

Rastegar-Pouyani, N., Johari, M., Rastegar-Pouyani, E. (2007): Field Guide to the Reptiles of Iran. Volume 1: Lizards. Second edition. Razi University Publishing, Iran. 296 p. (In Persian).

Schammakov, S., Ataev, C., Rustamov, E. A. (1993): Herpetogeographical map of Turkmenistan. Asiatic Herpetological Research 5: 127-136.



Figure 2. Dorso-lateral view of *Eremias strauchi kopetdaghica* from Khorasan province. Photograph by: Saeed Hosseinian.

Table 1. Locality records of *Eremias strauchi kopetdaghica* from Khorasan and Golestan provinces.

Museum number	N	E	Elevation	Source	Status
No tag	35 26	059 56	2300 m	Anderson, 1999	Literature
CAS 141185	35 29	059 12	1760 m	Anderson, 1999	Literature
No tag	37 17	055 17	0-150 m	Anderson, 1999	Literature
No tag	36 50	054 29	150 m	Anderson, 1999	Literature
SUHC 1069	35 31	059 04	1845 m	This study	Collected
SUHC 1068	35 32	059 11	1711 M	This study	Collected
No tag	36 40	058 20	1260 m	This study	Observed
No tag	35 36	058 32	1045 m	This study	Observed
No tag	37 21	056 18	1800 m	This study	Observed
NEZMUT 57	36 55	057 55	1480 m	This study	Collected
No tag	35 33	058 33	2142 m	This study	Observed
No tag	35 37	058 31	1818 m	This study	Observed
No tag	36 21	057 18	1800 m	This study	Observed

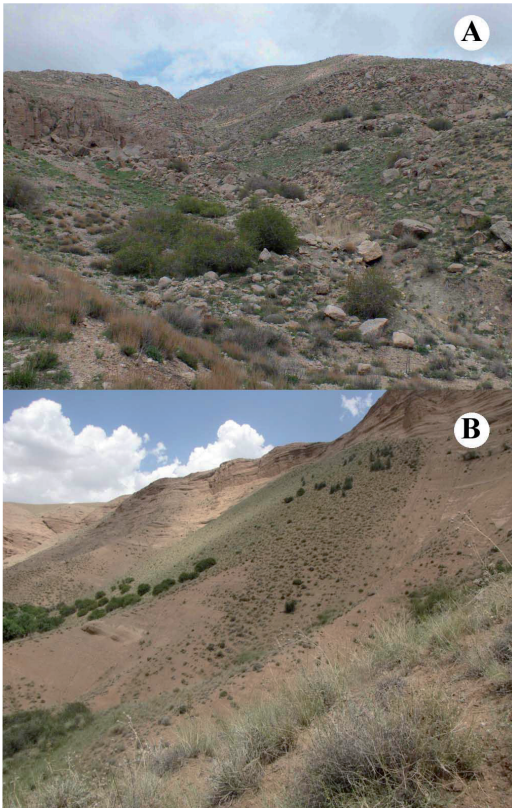


Figure 3. Typical habitat of the sub species in Khorasan (on the road from Neyshabour to Quchan) (Photograph by Saeed Hosseinian); B. Typical habitat at the new locality along the road from Kashmar to Neyshabour, Akbar abad village (Photo by Masoud Yousefi).