Iranian Journal of Animal Biosystematics(IJAB)
Vol.5, No.2, 65-79, 2009
ISSN: 1735-434X

The lizard fauna of Ilam province, Southwestern Iran

FATHNIA, B.[1,2,*], N. RASTEGAR-POUYANI[2], M. SAMPOUR[3], A.M. BAHRAMI[4] AND G. JAAFARI[5]

[1] *Department of Biology, Payam-e-Noor University, Ilam, Iran,*
[2] *Department of Biology, Faculty of Science, Razi University, 67149 Kermanshah, Iran*
[3] *Department of Biology, Faculty of Science, Lorestan University, Khoramabad, Iran*
[4] *School of Veterinary Sciences, Ilam University, Ilam, Iran*
[5] *General office of Ilam Environment, Ilam, Iran*

Received: 21 June 2009 Accepted: 25 October 2009

Western Iran in general and Ilam province in particular, has unique geographical and climatic conditions that support a rich flora and fauna. In view of the lack of in-depth studies of lizards of the region, an investigation was initiated in most areas of Ilam Province for an inventory of lizard species and their habitats. A total of 189 specimens were collected and identified from May 2005 to August 2009. Twenty one species belonging to 18 genera and 8 families were represented, including Agamidae: *Laudakia nupta, Trapelus lessonae* (formerly *T. ruderatus*), *Trapelus ruderatus* (formerly *T. persicus*); Eublepharidae: *Eublepharis angramainyu;* Gekkonidae: *Bunopus tuberculatus, Cyrtopodion scabrum, Cyrtopodion heterocercum, Hemidactylus persicus, Stenodactylus affinis, Tropiocolotes helenae*; Lacertidae: *Acanthodactylus boskianus, Apathya cappadocica, Mesalina brevirostris, Ophisops elegans*; Phyllodactylidae: *Asaccus elisae*; Scincidae: *Ablepharus pannonicus, Eumeces schneiderii, Trachylepis aurata, Trachylepis vittata*; Uromastycidae: *Uromastyx loricatus;* Varanidae: *Varanus griseus griseus, Varanus griseus caspius*. Comparing this list to the data provided by Anderson (1999), several lizards are reported for the first time in this region. With six species represented, gekkonids have the highest species diversity in the area.

Key words: Iranian Plateau, Ilam Province, Fauna, lizards.

INTRODUCTION

Many researchers have surveyed aspects of the herpetofauna of Iran, among them Mertens (1957), Anderson (1966, 1999), Leviton et al. (1992), and Tuck (1971, 1974). Although native Iranian researchers such as Latifi (1984, 1991), Balouch and Kami (1995), Kami and Vakilipoure (1996a, 1996b), Firouz (2000), and Rastegar-Pouyani et al. (2007) have done valuable surveys on the Iranian Plateau herpetofauna in recent years, the studies are insufficient, and new lizard species are still being discovered (Rastegar-Pouyani, 1996; Rastegar-Pouyani & Nilson, 1998; Rastegar-Pouyani & Rastegar-Pouyani, 2001; Rastegar-Pouyani et al., 2006, Bostanchi et al., 2006).

According to Anderson (1999), Iran has 13 geographical regions relative to lizard distribution. The geography of Ilam province includes three of these regions, the Zagros Mountains, the Khuzestan Plain, and the Western foothills of the Zagros Mountains. Two climatic conditions, Mediterranean and Dry and Semidry, exist in Ilam province. More than 78% of the province is covered with forests, meadows, and arid lands (Fathinia, 2007; Fathinia et al., 2009),thus the area should have a rich biodiversity of reptiles in general and of lizards in particular.

*CORRESPONDING AUTHOR

The present survey was the first carried out on the Ilam herpetofauna and the objective was to determine the lizard fauna, their habitats, and distribution.

MATERIAL AND METHODS

The study area is located in the western and southwestern regions of the Iranian Plateau between 31°58' to 34°15' N and 45°24' to 48°10' E (Fig. 1). The region is bordered to the north by Kermanshah province, to the south by Khuzestan province, to the west by the Iraqi border, and to the east by Lorestan Province. Altitude ranges from 50 m in the south to 3062 m in the Kabir-Kuh Mountain (to the east of the province). Annual precipitation varies from 200 mm in southern areas to 800 mm in the northern highlands (Fathinia, 2007). The survey was carried out from May 2005 to August 2009. Most specimens were caught by hand, although some elusive lizards, such as agamids and lacertids (e.g., *Laudakia nupta* and *Apathya cappadocica*), were collected by noose. Site data and habitat features were recorded for all species encountered. Specimens were preserved in 75% ethanol or in a mixture of 70% ethanol and 4% formalin. Voucher specimens are stored at Lorestan University and in the Razi University Zoological Museum (RUZM) at Razi University of Kermanshah, Iran. Specimens were identified according to Anderson (1999) using morphometric measurements by digital caliper to nearest 0.01 mm, coloration, and pholidosis features (including the number, structure, and range of scales and plates).
The "Flora of Ilam" (Mozaffarian, 2008) was referred to determine vegetation of the region relative to the lizard fauna.

RESULTS

A total of 189 specimens were collected in the study area comprising 21 species of 18 genera and 8 families. The list of the collected species is given in Table 1. The distribution of the studied species and their relevant photos are presented in Plates 1-6.

Family: Agamidae

Laudakia nupta nupta (De Filippi, 1843)

This species is widely distributed in the study area (Plate 1a). Four adult specimens were collected in June and July 2005 and August 2007 at elevations < 200 m to 2500 m. Their habitat consisted of rocky areas with crevices and boulders, limestone and gypsum foothills, cemeteries, ruined structures and homes near rocky areas, and bridges. The habitat may be with or without trees. Oak (*Quercus brantii*) covers most of the range of *L. n. nupta* in Ilam Province. Snout-Vent Length (SVL) of an adult male and female measured 150.37 mm and 132.56 mm, respectively. Plate 4a shows an adult male specimen of *L. n. nupta* in its natural habitat.

Trapelus lessonae (De Filippi, 1865)

Trapelus lessonae, formerly *T. ruderatus*, (Rastegar-Pouyani, 2000) has a wide distribution in Ilam province (Plate 1b). Fifteen specimens were collected in July 2005, April, September, and October 2006, and April and May 2009. Its habitat comprises low altitude plains, alluvial fans, mountains, and limestone and gypsum foothills, at 200–2000 m. Vegetation types included *Quercus brantii, Euphorbia spp, Capparis spinosa,* and annual plants. This species was collected in the south (Dehloran), north (Eivan & Karezan), and west (Bina & Bijar no-hunting area) of the region and was observed throughout the area during the field work. The specimens captured were sandy gray or grayish brown (Plate 4b). The largest adult female and male were 65.94 and 50.65 mm SVL, respectively.

Trapelus ruderatus ruderatus (Blanford, 1881)
Trapelus r. ruderatus, (formerly *T. persicus*, see Rastegar-Pouyani, 2000)**,** has a limited distribution and was collected and observed in the townships of Dehloran and Abdanan, both located in the south of the study area adjacent to the Khuzestan Plain (Plate 1c). Thirty two specimens were collected during August 2005, September 2006, September 2008, and April 2009 in lowland habitats with elevations from about sea level to 300 m. The habitat of this species is characterized by xerophytic plants, such as *Alhagi camelorum*, *Ziziphus numularia*, *Capparis spinosa*, and *Chrozophora tinctoria*. The largest male and female measured 111.76 and 92.72 mm SVL, respectively. Plate 4c shows a juvenile female *T. r. ruderatus* in its habitat.

Family: Eublepharidae
Eublepharis angramainyu Anderson and Leviton, 1996
Eublepharis angramainyu appears to have a wide distribution throughout the area (Plate 1d). Four adult specimens were collected in southern (Dehloran), eastern (Shabab), and northern (Karezan) regions of Ilam Province in July 2006, September 2008, and June 2009 at elevations of 247 to 1420 m. It was also observed in western areas of the province (Bina-Bijar non-hunting area). These locations coincide with three geographical regions (i.e. three geological regions) in Ilam province. *Eublepharis angramainyu* occupies gypsum deposits with deep crevices and mountainsides with large boulders in dense *Quercus brantii* vegetation. The largest male and female measured 154 mm and 143 mm SVL, respectively. *Eublepharis angramainyu* in its natural habitat at elevation of 1420 m is presented in Plate 4d.

Family: Gekkonidae
Bunopus tuberculatus Blanford, 1874
Bunopus tuberculatus has a narrow distribution in lowland habitats (Plate 1e). It was collected at elevations < 200 m to 426 m in the vicinity of the Iran-Iraq border on the Khuzestan Plain in Ilam (West) and Dehloran (South) Townships. Twenty adult and juvenile specimens were collected in September 2005, April 2007, and September 2008. It was found in drainages and alluvial fans west of the Zagros and west of the foothills of the Zagros Mountains. Xerophytic plants such as *Alhagi camelorum* and *Capparis spinosa* were found in its habitat. It was observed occupying a burrow with *Uromastyx loricatus*. Dorsal body coloration is brownish-gray with five darker transverse bars on the body and nine crossbars on the tail (Plate 4e). The largest female and male measured 54.09 mm and 54.72 mm SVL, respectively.
Cyrtopodion heterocercum (Blanford, 1874)
Cyrtopodion heterocercum is widely distributed throughout the region (Plate 1f). Twenty five specimens were collected in September 2005, July 2006, May 2007, and May 2009 in four areas including Karezan (north), Eivan (north), Dare-Shahr (east), and the Bina-Bijar no-hunting area (west). The sites are in the Zagros Mountains and its western foothills. Specimens were collected at altitudes of about 500 m to 2000 m. This species is a common house gecko and lives on mountainsides, gypsum and limestone foothills, under stones, in loamy soil, and under autumnal leaves of *Quercus brantii*. *Astragalus* spp. shrubs and *Quercus brantii* constitutes the dominant vegetation in the habitat of *C. heterocercum*. The distinguishing characters of this lizard are the 7-8 dorsal chevron-like dark crossbars on the back and 13-14 dark crossbars on the tail (Plate 4f). The largest male and female measured 34.90 mm and 32.55 mm SVL, respectively.

Cyrtopodion scabrum (Heyden, 1827)
Cyrtopodion scabrum is widely distributed in Ilam Province (Plate 1g). Fifteen adult and juvenile specimens were collected in July, August, and September 2005, August and October 2007, and May 2009. They were collected in seven localities throughout the province, Dare-Shahr, Abdanan, Dehloran, Ilam, Eivan, Karezan, and the Bina-Bijar non-hunting area. These sites are located in three geographic regions. *C. scabrum* occurred at altitudes < 200 m to 1400 m. It lives on the outdoor and indoor surfaces of both urban and rural houses as well as under bridges. Dorsal coloration is sandy gray with regular longitudinally arranged spots; tail with 13 dorsal transverse bars (Plate 4g). The largest male and female measured 53.30 mm and 54.00 mm SVL, respectively.

Hemidactylus persicus Anderson, 1872
Hemidactylus persicus was only collected in one locality in the area (Plate 1h). Two specimens were collected in September 2008 in Dehloran Township (south) on gypsum foothills on the Khuzestan Plain at an elevation of 247 m. The dorsum has 5 expanded yellow and dark colored bands (Plate 4h). The adult male and female measured 76.57 mm and 65.49 mm SVL, respectively.

Stenodactylus affinis (Murray, 1884)
Three male *Stenodactylus affinis* were collected in September 2008 in Dehloran Township (south) on the Khuzestan Plain at an elevation of 250 m. Its observed distribution was limited to the south of the province (Plate 2a). They were collected in a graveled site on gypsum foothills with *Alhagi camelorum* vegetation. Dorsal coloration is sandy gray with three interrupted crossbars on the dorsum and eight dark bands on the tail (Plate 5a). The largest male measured 34.90 mm SVL.

Tropiocolotes helenae helenae (Nikolsky, 1907)
Tropiocolotes h. helenae is known only in the Zagros Mountains in Karezan (north), at an elevation of 1324 to 1400 m (Plate 2b). Four specimens were collected in May 2006 and September 2008. All were caught under stones in stony foothills and mountainsides with deep crevices, in the Zagros Mountains. The main vegetation of the locality is *Quercus brantii*. The collected specimens have five undulating dark transverse dorsal bars and six dark crossbars on the tail (Plate 5b). The largest female and male measured 24.41 mm and 20.61 mm SVL, respectively.

Family: Lacertidae
Acanthodactylus boskianus (Daudin, 1802)
Acanthodactylus boskianus is known in two localities in the western foothills of Ilam province (Plate 2c). Three adult specimens were collected in May and June 2009 from the Bina and Bijar and the Kooleg non-hunting areas, both in the west of the province at elevations of 450 m to 763 m. The habitat of *A. boskianus* is the foothills of the Zagros Mountains. The main vegetation of its habitat comprised *Noaea mucronata*, *Salsola spp.*, *Prosopis farcta*, *Astragalus golicucanthus*, *Pteropyrum naufelum*, *Atraphaxis spinosa*, and *Astragalus* spp. shrubs. Its habitat is mainly composed of gypsum and limestone deposits with deep crevices and holes. Dorsal color is sandy gray with five dorsal crossbars and a lateral stripe (Plate 5c). The largest male and female measured 69.44 mm and 64.56 mm SVL, respectively.

Apathya cappadocica urmiana Lantz and Suchow, 1934
Apathya c. urmiana is known in a single locality of the Zagros Mountains (Plate 2d). Seven adult and juvenile specimens were collected in August and September 2007 and 2008 at the Manesht Mountain, in the north of the region, at an elevation of 2120 m. The habitat of this lizard is the Zagros Mountains and comprised high rocks and boulders with deep crevices. The main vegetation is composed of trees and shrubs such as *Quercus brantii*, *Pistacia atlantica*, *Celtis caucasica*, *Rhamnus pallasi*, and *Thymus eriocalyx*. The dorsal coloration is olive brown or green with dark spots (Plate 5d). The largest male and female measured 66.29 mm and 63.91 mm SVL, respectively.

Mesalina brevirostris fieldi (Hass and Werner, 1969)
Mesalina b. fieldi seems to have a narrow distribution in the southern areas of the region (Plate 2e). Eight adult and juvenile specimens were collected in Dehloran and Abdanan townships on the Khuzestan Plain at an elevation of about 300 m in September 2006 and 2008 and April 2009. They were collected on alluvial fans with rubble stones. The habitat is mainly covered with annual Gramineae plants and shrubs such as *Ziziphus numularia*. The dorsal coloration is sandy with longitudinally arranged brown spots (Plate 5e). The largest male measured 50.89 mm SVL.

Ophisops elegans elegans Menetries, 1832
Ophisops e. elegans has a wide distribution throughout the region (Plate 2f) from lowland areas (less than 300 m) to peaks of the mountains (about 2500 m). Thus it occurs in the three geographic regions occurring in Ilam province. Ten adult specimens were collected. The dorsal coloration is olive brown with two light dorsolateral stripes (Plate 5f). The largest male and female measured 50.70 mm and 47.20 mm SVL, respectively.

Family: Phyllodactylidae
The genus *Asaccus* formerly belonged to the family Gekkonidae, but recently has been placed in the family Phyllodactylidae based on molecular evidence (Gamble et al., 2008).
Asaccus elisae (Werner, 1896)
Ten *Asaccus elisae* were collected in southern (Dehloran), northern (Eivan), and western (Bina and Bijar and Mehran) areas of the province (Plate 2g). This species was also observed in eastern areas (Dare-Shahr) of the province. They were collected in July 2007 and April and September 2008. The aforementioned areas are located in the three geographic regions of the province. The habitat comprises gypsum and limestone deposits, rocky Mountains and valleys, caves, under bridges and the walls of houses. The altitude ranges from 137 m to 1400 m. The specimens have eight wide orange mottles on the dorsum extending from the nape to the sacrum. The tail is with or without eight brown to black crossbars (Plate 5g). The largest male measured 52.41 mm SVL.

Family: Scincidae
Ablepharus pannonicus Fitzinger, 1823
Ablepharus pannonicus is known in two localities, Karezan and Eivan, both in the north of the region within the Zagros Mountains at elevations of 1272 to 1822 m (Plate 2h). Three adults were collected during May 2006 and August 2007. They were collected under autumnal *Quercus brantii* leaves and in annual dried plants. The dorsal color is dark brown with four longitudinal rows of scales on the dorsum (Plate 5h). The largest male specimen measured 45 mm SVL.

Eumeces schneiderii princeps (Eichwald, 1839)
Two specimens of *Eumeces s. princeps* were collected in Dehloran Township on the Khuzestan Plain (Plate 3a) in September 2005 at an elevation of 200 m. They were collected from their burrows on alluvial fans under plants such as *Ziziphus numularia* and *Chrozophora tinctoria*. The dorsal coloration is brownish with yellow-orange spots in regular longitudinal rows (Plate 6a). The largest specimen measured 112 mm SVL.

Trachylepis aurata transcaucasica Chernov, 1926
Trachylepis a. transcaucasica was collected and observed throughout the region and observed to have a wide distribution (Plate 3b), covering the three geographic regions of Ilam province. Fifteen specimens were collected in the north (Karezan, Ilam, and Eivan), west (Bina and Bijar, Kooleg, and Mehran), south (Dehloran and Abdanan), and east (Dare-Shahr) of the region. It occupies a wide range of territories with varying vegetation types, from Mediterranean (*Quercus brantii*) to Xeric-adapted (*Ziziphus numularia*), in variable altitudes from nearly sea level to approximately 2500 m. Color pattern is olive-brown above with four longitudinal stripes on the head (Plate 6b). The largest male and female measured 93.44 mm and 81.19 mm SVL, respectively.

Trachylepis vittata (Olivier, 1804)
Trachylepis vittata is known in a single locality in the eastern part of the region (Plate 3c) in the Zagros Mountains. The only specimen was a male collected in September 2005 from Dare-Shahr in a park with hand-planted *Eucalyptus microtheca* trees at an elevation of 675 m. Its habitat was stony with annual Gramineae vegetation. The dorsal color was dark olive-brown with a light vertebral stripe (Plate 6c). This single specimen measured 85 mm SVL with a 220 mm tail.

Family: Uromastycidae
Uromastyx loricatus (Blanford, 1875)
Uromastyx loricatus has a relatively wide distribution in the region (Plate 3d). Four specimens were collected in Abdanan and Dehloran Townships in the Khuzestan Plain, and it was also observed in Dasht-e-lik and Kooleg in the western foothills of the Zagros Mountains. The specimens were collected in September 2005, September 2008, and June 2009. The altitudes ranged from near sea level to approximately 500 m. The dorsum is black to orange (Plate 6d). The largest female measured 210 mm SVL.

Family: Varanidae
Varanus griseus griseus (Daudin, 1803)
Two juvenile specimens of *Varanus g. griseus* were collected in Dehloran (Plate 3e) at an elevation of 200 m in September 2005. It also was observed in Abdanan and Mehran townships on alluvial fans. The dorsum bears 10 dark crossbars and 17 dark bars on the tail (Plate 6e). The juveniles measured 550 and 540 mm SVL and the tail measured 230 mm.

Varanus griseus caspius Eichwald, 1831
Varanus g. caspius was only observed in the Kooleg non-hunting area (Plate 3f), in May 2009 at an elevation of 680 m. The locality lies in the foothills of the Zagros Mountains and is less than 10 km from Mehran city. *Varanus g. caspius* is seen in Plate 6f.

DISCUSSION

The following discussion includes only species reported for the first time from Ilam Province. Based on the data collected during this four-year study, new information about various aspects of the lizard fauna including distribution, elevation range, and overlapping distributions were obtained.

Two species of the genus *Trapelus* (*T. lessonae* and *T. ruderatus*) found in the region are sympatric on the alluvial fans of Dehloran Township at an elevation of 200 m. The coordinates of the overlapping sites are 33.5°39' N and 45°18'E.

According to Anderson (1999), *Eublepharis angramainyu* has an altitude range of 300 to 1000 m, but its maximum altitude in the Ilam Province extends to 1420 m at 46°29′ E and 33° 43′ N in this study.

The distribution of *Hemidactylus persicus*, *Stenodactylus affinis*, and *Tropiocolotes h. helenae* extended northward to coordinates of 47°19′ E and 32° 41′ N for *H. persicus*, and *S. affinis* and 47° 28′ E and 33° 44′ N for *T. h. helenae*, far beyond their former known distributions (see Anderson, 1999).

Occurrence of *Acanthodactylus boskianus* is reported for the second time in Iran, and distribution extended westward to coordinates 46°08′ E and 33° 19′ N, close to the Iran-Iraq border.

Distribution of *Apathya cappadocica urmiana* was previously reported to be limited to the northwest of Iran (Anderson, 1999), but the present study determined its distribution to be extended further southward to 46°27′ E and 33° 43′ N.

From the family Scincidae, *Trachylepis aurata* and *T. vittata* are sympatric in Dare-Shahr Township at coordinates of 47° 23′ E and 33° 08′ N in Kowsar Park around Dare-Shahr city.

Varanus griseus caspius is found throughout the Iranian plateau (Anderson, 1999), but how far westward is unknown. Based on observation, distribution of this subspecies extended west to the region of Kooleg in the vicinity of the Iran-Iraq border, which lies in the western foothills of the Zagros Mountains.

Among the most interesting phenomena observed in this survey was the coexistence in burrows of *U. loricatus* (Uromastycidae) with *T. ruderatus* (Agamidae) and *B. tuberculatus* (Gekkonidae).

ACKNOWLEDGEMENTS

We thank Professor S. C. Anderson, University of the Pacific, Stockton, California, USA, for editing and improving this paper. We also thank the authorities of Department of the Environment of Ilam for supporting us during the survey.

LITERATURE CITED

ANDERSON, S. C. 1966. The turtles, lizards, and amphisbaenians of Iran. Ph.D. Thesis. Stanford University. 660 pp.

ANDERSON, S. C. 1999. The lizards of Iran. Society for the study of Amphibians and Reptiles, 442 pp.

BALOUTCH, M. AND H. G. KAMI. 1995. Amphibians of Iran. Tehran University Publication, Tehran. 177 pp.

BOSTANCHI, H., S. C. ANDERSON, H. G. KAMI, AND TH. J. PAPENFUSS. 2006. A new species of *Pseudocerastes* with elaborate tail ornamentation from western Iran (Squamata: Viperidae). *Proc. Calif. Acad. Sci. Ser. 4*, 57(14), 443 – 450.

FATHINIA, B. 2007. The biosystematic study of lizards of Ilam Province. Lorestan University. MSc. Thesis.

FATHINIA, B., S. C. ANDERSON, N. RASTEGAR-POUYANI, H. JAHANI, AND H. MOHAMADI. 2009.

Notes on the natural history of *Pseudocerastes urarachnoides* (Squamata: Viperidae). Russian Journal of Herpetology Vol. 16, No. 2, 2009, pp. 134 – 138.

FIROUZ, E. 2000. A Guide to the Fauna of Iran (In Persian). Iran University Press, Tehran. 491 pp

GAMBLE, T., A. M. BAUER, E. GREENBAUM AND T. JACKMAN. 2008. Out of the blue: a novel, trans-Atlantic clade of geckos (Gekkota, Squamata). *Zoologica Scripta* 37: 355-366.

KAMI, H. G. AND A. VAKILIPOURE. 1996A. Geographic distribution: *Bufo bufo*. *Herpetological Review* 27(3): 148.

KAMI, H. G. AND A. VAKILIPOURE. 1996B. Geographic distribution: *Rana camerani*. *Herpetological Review* 27(3): 150.

LATIFI, M. 1984. The snakes of Iran. Iran Department of the Environment, Tehran. 221pp.

LATIFI, M. 1991. The snakes of Iran. Society for the Study of Amphibians and Reptiles. Contributions to Herpetology 7.viii + 159 pp.

LEVITON, A. E., S. C. ANDERSON, K. A. ADLER AND S. A. MINTON. 1992. Handbook to Middle East Amphibians and Reptiles. Oxford, Ohio. Vii + 252 pp.

MERTENS, R. F. W. 1957. Weitere Unterlagen zur Herpetofauna von Iran 1956. *Jahreshefte desVereins fur vaterlandische Naturkunde in Wurtemberg* 112(1): 118–128.

MOZAFFARIAN, V. 2008. Flora of Ilam. Ilam Natural resources press (In Persian).

NAZARI-SERENJEH, F., F. TORKI. 2008. Additional specimens of the gecko *Asaccus nasrullahi* Werner, 2006 (Reptilia: Phyllodactylidae), with notes on taxonomy and ecology. *Zoology in the Middle East* 44, 2008: 57-66.

RASTEGAR-POUYANI, N. 1996. A new species of *Asaccus* (Sauria: Gekkonide) from the Zagros Mountains, Kermanshahan Province, western Iran. Russian Journal of Herpetology 3(1): 11–17.

RASTEGAR-POUYANI, N. AND G. NILSON. 1998. A new species of *Lacerta* (Sauria: Lacertidae) from the Zagros Mountain, Esfahan Province, west-central Iran. *Proceedings of the California Academy of Science,* ser. 4 50(10): 267–277.

RASTEGAR-POUYANI, N. AND E. RASTEGAR-POUYANI. 2001. A New Species of *Eremias* (Sauria: Lacertidae) from the Highlands of Kermanshah Province, Western Iran. *Asiatic Herpetological Research*, 9: 107-112.

RASTEGAR-POUYANI, N., G. NILSON AND H. FAIZI. 2006. A new species of *Asaccus* (Sauria: Gekkonidae) from Kurdistan province, western Iran. *Hamadryad*, Vol. 30, Nos. 1 & 2, pp. 141 – 150.

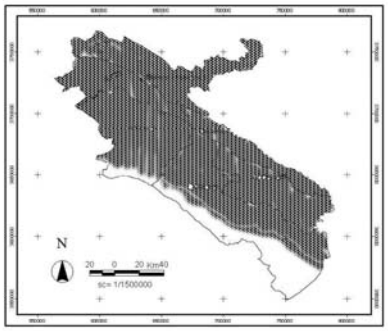
RASTEGAR-POUYANI, N., E. RASTEGAR-POUYANI AND M. JAWHARI. 2007. Field Guide to the Reptiles of Iran (Vol. 1, Lizards). Razi University Press (In Persian).

TUCK, R. G. 1971. Amphibians and reptiles from Iran in the United State National Museum Collection. *Bulletin of the Maryland Herpetological Society* 7(3): 48–36.

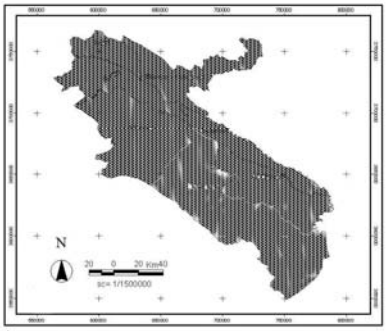
TUCK, R. G. 1974. Some amphibians and reptiles from Iran. *Bulletin of the Maryland Herpetological Society* 10: 59–65.

PLATE 1

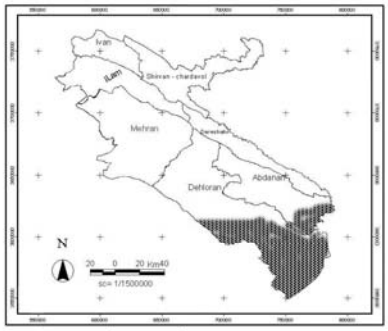
Distribution of species in the study area



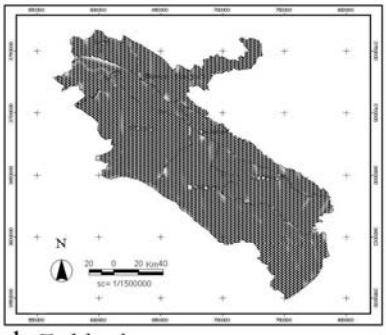
a. *Laudakia nupta*



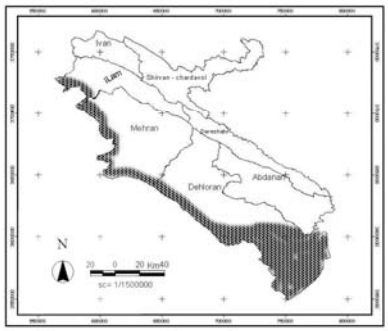
b. *Trapelus lessonae*



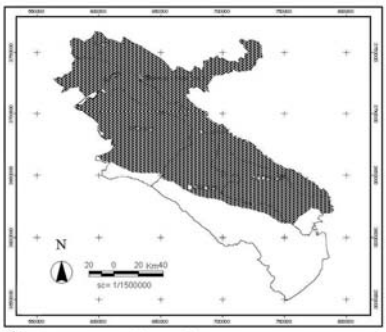
c. *Trapelus ruderatus*



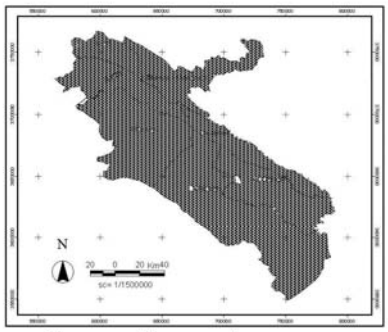
d. *Eublepharis angramainyu*



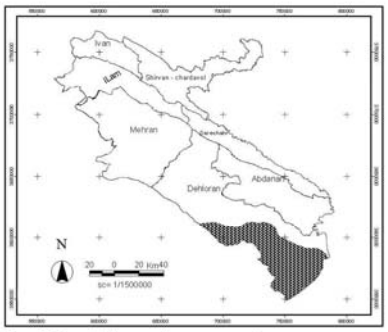
e. *Bunopus tuberculatus*



f. *Cyrtopodion heterocercum*



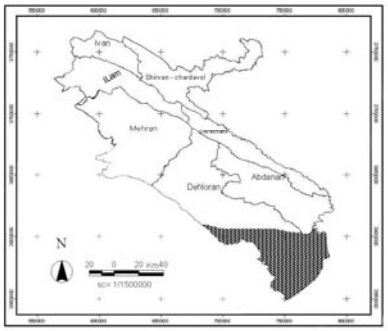
g. *Cyrtopodion scabrum*



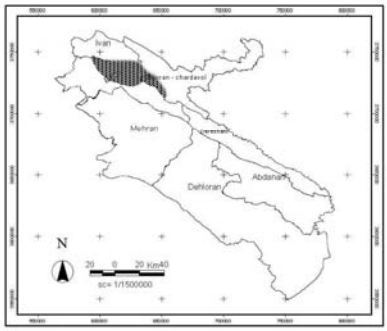
h. *Hemidactylus persicus*

PLATE 2

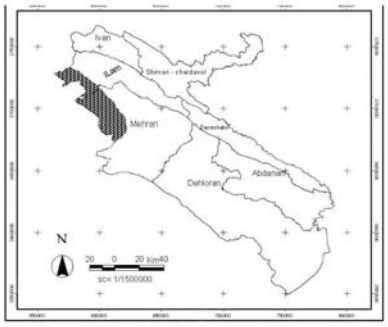
Distribution of species in the study area



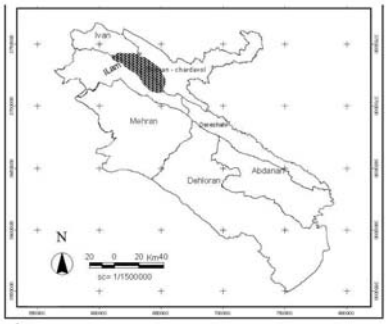
a. *Stenodactylus affinis*



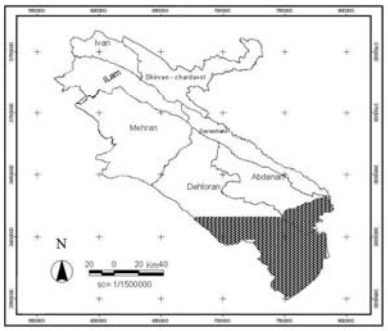
b. *Tropiocolotes helenae*



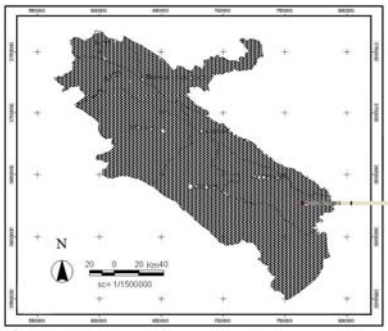
c. *Acanthodactylus boskianus*



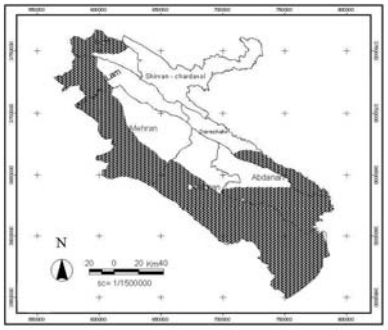
d. *Apathya cappadocica urmiana*



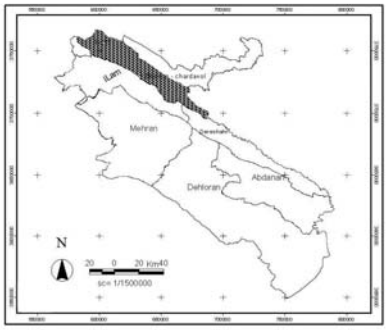
e. *Mesalina brevirostris fieldi*



f. *Ophisops elegans elegans*



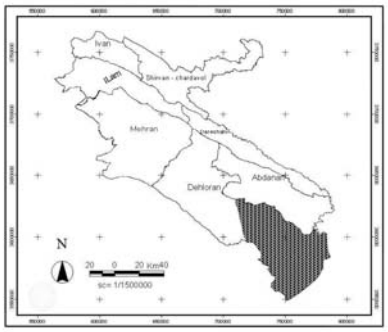
g. *Asaccus elisae*



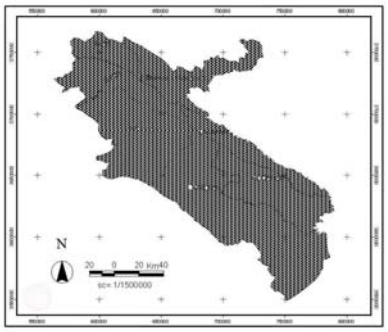
h. *Ablepharus pannonicus*

PLATE 3

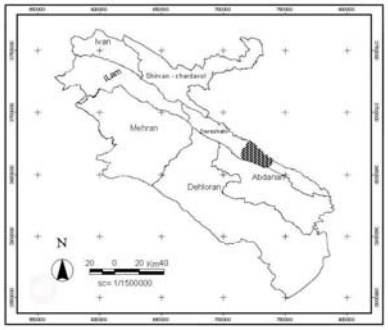
Distribution of species in the study area



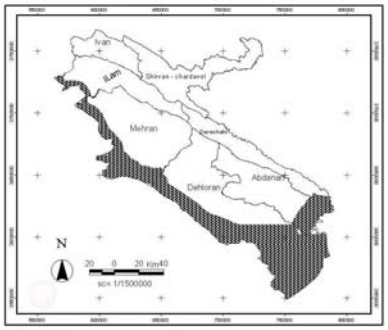
a. *Eumeces schneiderii princeps*



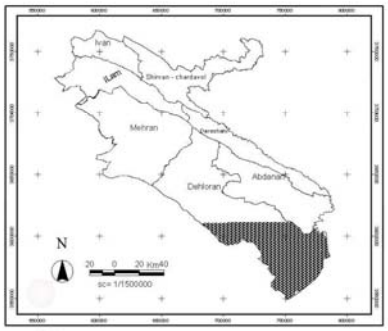
b. *Trachylepis a. transcaucasica*



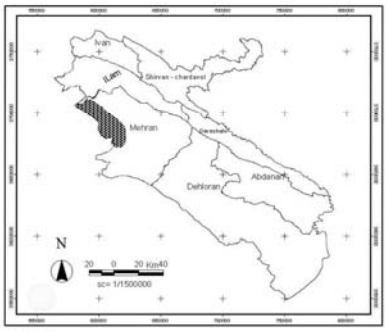
c. *Trachylepis vittata*



d. *Uromastyx loricatus*



e. *Varanus griseus griseus*



f. *Varanus griseus caspius*

PLATE 4

a. *Laudakia nupta nupta*

b. *Trapelus lessonae*

c. *Trapelus ruderatus*

d. *Eublepharis angramainyu*

e. *Bunopus tuberculatus*

f. *Cyrtopodion heterocercum*

g. *Cyrtopodion scabrum*

h. *Hemidactylus persicus*

PLATE 5

a. *Stenodactylus affinis*

b. *Tropiocolotes helenae*

c. *Acanthodactylus boskianus*

d. *Apathya cappadocica urmiana*

e. *Mesalina brevirostris fieldi*

f. *Ophisops elegans elegans*

g. *Asaccus elisae*

h. *Ablepharus pannonicus*

PLATE 6

a. *Eumeces schneiderii princeps*

b. *Trachylepis a. transcaucasica*

c. *Trachylepis vittata*

d. *Uromastyx loricatus*

e. *Varanus griseus griseus*

f. *Varanus griseus caspius*