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Research Article

Turk J Zool
2011; 35(4): 491-501
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doi:10.3906/zoo-0908-5

The herpetofauna of the Sultan Mountains (Afyon-Konya-Isparta), Turkey*

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Received: 03.08.2009

Abstract: In this study, 29 reptile and amphibian species were recorded in 25 different localities in the Sultan Mountains. Of these, 5 were anurans, 1 was a tortoise, 1 was a turtle, 11 were lizards, and 11 were snakes. A chorotype classification of the species recorded in the Sultan Mountains is also given.

Key words: Herpetofauna, Sultan Mountains, chorotype

Sultan Dağlarının herpetofaunası (Afyon-Konya-Isparta), Türkiye

Özet: Bu çalışmada, Sultan Dağları'nda 25 farklı lokaliteden 29 reptil ve amfibi türü tespit edilmistir. İncelenen örneklerden 5 tanesi kuyruksuz kurbağa, 1 tanesi kara kaplumbağası, 1 tanesi su kaplumbağası, 11 tanesi kertenkele ve 11 tanesi de yılan türlerine aittir. Ayrıca, Sultan Dağlarında kayıt edilen türlerin bir chorotip sınıflandırması verilmiştir.

Anahtar sözcükler: Herpetofauna, Sultan Dağları, chorotip

Introduction

Studies published by foreign or Turkish researchers on the reptile and amphibian species of different regions of Turkey have usually focused on a specific species or group of species (Baran, 1986; for a review of the literature, see Sindaco et al., 2000). However, recently detailed research results on the distribution of amphibian and reptilian fauna of specific regions of Turkey have also been published (Baran, 1980, 1981, 1982, 1983, 1984, 1990; Uğurtaş, 1989; Baran et al., 1992, 1997; Tok, 1995; Kumlutaş et al., 1998; Uğurtaş et al., 2000; Baran et al., 2001, 2004; Ilgaz and Kumlutaş, 2005; Uğurtaş et al., 2007; Hür et al., 2008).

Turkey's rich and diverse herpetofauna depends on high habitat diversity and zoogeographical factors. In particular, due to glaciation and the postglacial period, Anatolian high mountain barriers sometimes restrict the dispersion of species, and some mountains (Sultan Mountains, Kazdağı, Uludağ, etc.) provide important

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refuges for fauna (Kosswig, 1955; Demirsoy, 1999). In recent studies (Kumlutaş et al., 2004c; Kutrup et al., 2005; Göçmen et al., 2007), records of some species and subspecies outside their known localities pointed out that the distribution of species and subspecies in Anatolia is particularly affected by climate and other environmental factors. Climatic conditions are also associated with differences in the morphological characteristics among populations of some species (Kutrup et al., 2006; Gvoždik et al., 2008).

In addition to providing an important refuge for fauna, the high inland Sultan Mountains are located in an important climatic transition zone (Atalay, 2002). The herpetofauna of the Sultan Mountains has not been examined in detail. In this study, we aimed to create a record of the herpetofauna of the Sultan Mountains and contribute to the body of information on Turkish herpetofauna.

Materials and methods

A total of 551 amphibian and reptile specimens were collected during our study, in the period between 2001 and 2004 (some specimens were examined and released). The specimens were given collection numbers at the Zoology Department of Ege University and are now kept at the Zoology Department, Faculty of Science and Arts, Celal Bayar University. The specimens were fixed using traditional processes (Başoğlu and Baran, 1977, 1980). The systematics of the examined material were studied using the current literature (Başoğlu and Baran, 1977, 1980; Başoğlu and Özeti, 1973; Baran and Atatür, 1998; Venchi and Sindaco, 2006). The research area from which specimens were collected is shown in Figure 1. The study area is situated in the southwestern part of the central Anatolian basins. There are numerous summits in this chain that are over 2000 m high, among them Gelincikana Peak, which rises 2610 m above sea level (a.s.l.). The natural vegetation of the mountains is composed of *Pinus nigra* (Arnold, 1758), *Cedrus libani* (A.Rich., 1823), *Juniperus oxycedrus* L., 1753, *Corylus avellana* L., 1753, and *Taxus baccata* L., 1753. These species are also seen on the northern slopes of the mountains. The main herbaceous plants in the mountain range are: *Festuca* sp. L., 1753, *Bromus* sp. L., 1753, *Thymus* sp. L., *Astragalus* sp. L., 1753, *Lotus comiculatus* L., 1753, *Phalaris* sp. L., 1753, and *Scleranthus* sp. L., 1753. According to their distribution patterns, the species were classified into major chorotypes based on the guidelines prepared by Vigna Taglianti et al. (1999) and Sindaco et al. (2000).

Results and discussion

In detailed excursions to the research area 13 families from 24 genera, including 29 species, were identified as inhabitants of the region (5 anurans, 1 tortoise, 1 turtle, 11 lizards, and 11 snakes). Among these, *Bufo bufo* (Linnaeus, 1758), *Pseudopus apodus* (Pallas, 1775), *Hemidactylus turcicus* (Linnaeus, 1758), *Trachylepis aurata* (Linnaeus, 1758), *Trachylepis vittata* (Olivier, 1804), *Typhlops vermicularis* Merrem, 1820, *Elaphe sauromates* (Pallas, 1814), and *Telescopus fallax* (Fleischmann, 1831) were collected for the first time from this region.

Bufo bufo is distributed in northwestern Anatolia, the Black Sea coastal strip, and the Mediterranean and Aegean regions in Turkey (Başoğlu and Özeti, 1973; Yılmaz and Kumlutaş, 1995; Baran and Atatür, 1998). The subspecific status of this species is not clear. Based on serological data, Tosunoğlu and Taşkavak (2001) recommended that *B. b. spinosus* (Daudin, 1803) be synonymized with *B. b. verrucosissimus* (Pallas, 1814). Similar results were obtained by Kutrup et al. (2006) in a study based on mitochondrial DNA data. Özdemir and Baran (2002) also stated that Murat Mountain (Kütahya) specimens should be included in the subspecies of *B. b. spinosus*. Finally, common toads of Anatolia (Turkey) previously recognized as *B. b. spinosus* were assigned to *B. b. verrucosissimus* by Litvinchuk et al. (2008). Because of their controversial status, the specimens collected from the Sultan Mountains were evaluated at species level only. In this study, specimens were collected from Dereçine village, near Akşehir Lake (Konya) in the Sultan Mountains. The ground color of the dorsum was dark-brownish, the venter was yellowish-white, and the iris of the eye was red in all specimens. Some of the body measurements and ratios from *B. bufo* specimens examined in this study are given in Table 1.

Materials List (N: number of specimens)

Family	Species	(N)	Localities
Bufonidae	*Bufo bufo* (Linnaeus, 1758)	5	6
	Pseudepidalea viridis (Laurenti, 1768)	32	6, 11, 13, 17, 19
Hylidae	*Hyla arborea* (Linnaeus, 1758)	41	6, 11, 19
Ranidae	*Pelophylax ridibundus* complex (Pallas, 1771)	82	6, 8,11, 13, 16, 18, 23, 7
	Rana macrocnemis Boulenger, 1885	21	6, 8, 4, 23
Emydidae	*Emys orbicularis* (Linnaeus, 1758)	10	7
Testudinidae	*Testudo graeca* Linnaeus, 1758	17	1, 2, 6, 8, 11, 18
Anguidae	*Pseudopus apodus* (Pallas, 1775)	1	20
Gekkonidae	*Cyrtopodion kotschyi* (Steindachner, 1870)	41	6, 8, 17
	Hemidactylus turcicus (Linnaeus, 1758)	2	1
Agamidae	*Laudakia stellio* (Linnaeus, 1758)	22	11, 20
Lacertidae	*Anatololacerta danfordi* (Günther, 1876)	27	6, 9, 10, 13, 14, 15, 16
	Parvilacerta parva (Boulenger, 1887)	23	9, 13, 24
	Lacerta trilineata Bedriaga, 1886	30	6, 7, 9, 10, 11, 12,13, 21, 23, 25
	Ophisops elegans Menetries, 1832	89	6, 11, 12, 13, 15, 16, 18, 20, 23
Scincidae	*Ablepharus kitaibellii* (Bibron-Bory, 1833)	11	6, 13, 17
	Trachylepis aurata (Linnaeus, 1758)	6	6, 11, 22, 23
	Trachylepis vittata (Olivier, 1804)	18	13, 15
Typhlopidae	*Typhlops vermicularis Merrem, 1820*	15	3
Colubridae	*Hierophis caspius (Gmelin, 1789)*	6	6, 23
	Hierophis schmidti (Nikolsky, 1909)	1	13
	Eirenis modestus (Martin, 1838)	25	1, 3, 6, 23, 24, 25
	Zamenis hohenackeri (Strauch, 1873)	1	6
	Elaphe sauromates (Pallas, 1814)	1	6
	Malpolon monspessulanus (Hermann, 1804)	1	20
	Natrix natrix (Linnaeus, 1758)	10	1, 2, 6, 13, 18, 25
	Natrix tessellata (Laurenti, 1768)	6	6, 17
	Telescopus fallax (Fleischmann, 1831)	2	1, 6
Viperidae	*Montivipera xanthina (Gray, 1849)*	5	6, 9

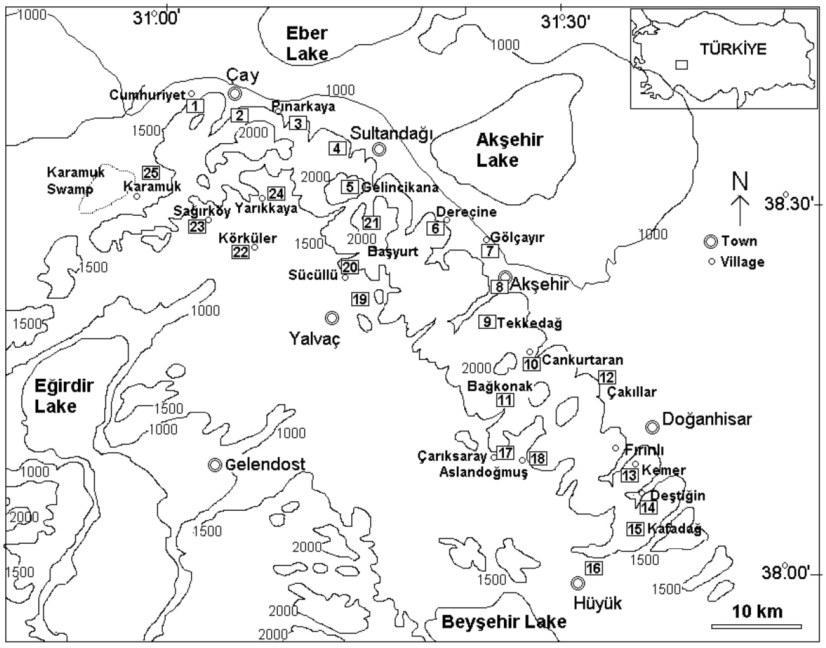

Figure 1. The research area from which specimens were collected (1 - Cumhuriyet, 2 - Çay, 3 - Pınarkaya, 4 - Sultandağ, 5 - Gelincikana, 6 - Dereçine, 7 - Gölçayır, 8 - Akşehir, 9 - Tekkedağ, 10 - Cankurtaran, 11 - Bağkonak, 12 - Çakıllar, 13 - Kemer, 14 - Deştiğin, 15 - Kafadağ, 16 - Hüyük, 17 - Çarıksaray, 18 - Aslandoğmuş, 19 - Yalvaç, 20 - Sücüllü, 21 - Başyurt, 22 - Körküler, 23 - Sağır, 24 - Yarıkkaya, 25 - Karamuk).

Table 1. Body measurements and ratios for *Bufo bufo*. N: number of specimens, M: mean value, Min: minimum value, Max: maximum value, SE: standard error, SD: standard deviation.

	♀♀					
	N	M	Min	Max	SE	SD
Total body length	5	96.01	87.87	105.95	2.96	6.63
Head length	5	23.20	20.94	25.56	0.85	1.91
Head width	5	36.30	30.64	41.27	1.93	4.33
Parotoid length	5	19.90	16.03	23.94	1.34	3.01
Length between parotoids	5	17.34	15.50	19.65	0.77	1.72
Metatarsal tubercle length	5	5.53	4.15	6.35	0.39	0.88

According to Baran et al. (1988) and Sindaco et al. (2000), *Pseudopus apodus* is found in the Aegean region, along the Mediterranean and Black Sea coasts, and in the Ararat area in Turkey. Baran et al. (1988) also reported that *P. apodus* was observed by Kasparek at Eğirdir Lake (Isparta). In this study, by recording *P. apodus* in the Sultan Mountains, we were able to clarify the occurrence of this species.

The adult male examined in this study had a total length of 840 mm and a tail length of 430 mm. The pileus length was 41.10 mm, the pileus width was 22.35 mm, and the ratio of pileus length to pileus width was 1.84. The number of dorsal scales in the transverse of the specimen was 99, and the number of ventral scales in the transverse was 118. There were 13 rows of longitudinal dorsal scales and 10 rows of longitudinal ventral scales. The ground color of the dorsum was dark brown. When the color pattern and pholidosis characters of the specimen are compared to the literature (Obst, 1978; Öz, 1982) our sample shows similarities with *O. a. thracius* (Obst, 1978) in terms of coloration characteristics, the number of ventrals, and the ratio of pileus length to pileus width.

Hemidactylus turcicus specimens were collected from only one locality (Cumhuriyet, Afyon) in the research area. In both specimens, postnasal plates were 2-2, the number of longitudinal tubercles on the dorsum was 14, the number of supralabials was 9, with 7 sublabials, and longitudinal ventral scales were 37 and 38, respectively. The head widths were 11.94 and 11.01 mm, snout + vent lengths were 35.51 and 29.05 mm, and total body lengths were 67.21 and 60.36 mm. The data related to the morphological characteristics of our specimens agree with those from the literature (Baran and Gruber, 1982; Baran and Atatür, 1998; Kumlutaş et al., 2004a; Yıldız et al., 2007).

Trachylepis aurata is distributed in western and southern Anatolia, as well as in the southern part of central Anatolia in Turkey (Yılmaz, 1977; Sindaco et al., 2000; Baran and Atatür, 1998). Within the area of its distribution, Özdemir and Baran (2002) and Kumlutaş et. al. (2004a) recorded this species in new localities (Manavgat, Aksu-Isparta, and Arapsuyu-Antalya). In this study, the villages of Körküler, Sağır, Bağkonak (Isparta), and Dereçine (Afyon) were found to host this species. Baran and Atatür (1998) also set the vertical distribution of this species at 1200 m a.s.l. In this study, Dereçine (Afyon) specimens were collected at an elevation of 1545 m a.s.l. The pholidosis characters and morphometric measurements of the *Trachylepis aurata* specimens examined in this study are given in Table 2. When the pholidosis characters and morphometric

Table 2. The pholidosis characters and morphometric measurements of *Trachylepis aurata* specimens examined in this study.

	♂♂ + ♀♀ + juv.					
	N	M	Min	Max	SE	SD
Supralabials	6	7.3	7	8	0.71	0.50
Supraocular	6	4	4	4	-	-
Subdigital lamellae	6	19.20	18	21	1.06	0.88
Number of midbody scales	6	36.83	36	38	0.20	0.67
	♂♂ + ♀♀					
Total body length	2	205.50	203	208	2.50	3.54
Tail length	2	117.00	114	120	3.00	4.24
Snout + vent length	4	89.15	83.64	97.39	3.27	6.54
Head width	4	13.05	11.98	14.32	0.54	1.08
Frontal length	4	4.56	4.32	5.00	0.14	0.29
Frontoparietal + interparietal length	4	4.26	3.80	4.47	0.15	0.31
Head length	4	16.58	15.50	18.00	0.63	1.27
Snout + vent length/forelegs length	4	3.61	3.31	3.79	0.10	0.21
Snout + vent length/hind legs length	4	24.70	23.26	26.16	0.63	1.27
Snout + vent length/head length	4	5.37	5.28	5.42	0.03	0.06

measurements of the 2 specimens are compared with the data given in the literature (Mertens, 1952; Yılmaz, 1977; Tok, 1999), our samples do not show remarkable differences from the subspecies of *T. a. aurata* (Linnaeus, 1758).

The occurrence of the *Trachylepis vittata* in Anatolia was first reported from Mersin by Werner in 1898. Later, this species was recorded in Eskişehir, Adana, and Konya (Werner, 1902). Budak (1973) also found this species in Mut (Mersin), Silifke (Mersin), Kozan (Adana), Ekbez (Antakya), Hassa (Hatay), Samandağ (Hatay), and the Tektek Mountains (Şanlıurfa). According to Baran and Atatür (1998), the distribution range of this species covers central, southern, and southeastern Anatolia in Turkey. A gap in the distribution range of *T. vittata* in the area between Eskişehir and Konya was apparently due to insufficient surveying. In this study, the occurrence of this species within the area of distribution was clarified by recording *T. vittata* in the Sultan Mountains. Baran and Atatür (1998) also recorded the vertical distribution of this species at 1000 m a.s.l. Our specimens were collected at an elevation of 1765 m a.s.l. The pholidosis characters and morphometric measurements of the *T. vittata* specimens examined in this study are given in Table 3.

According to Budak (1976), *Anatololacerta danfordi* has 3 subspecies (*A. d. danfordi*, *A. d. pelasgiana*, and *A. d. anatolica*). Later, Eiselt and Schmidtler (1986) increased these 3 subspecies to full specific rank and described 6 new subspecies. Kumlutaş et al. (2003) determined that *A. d. bileki*, *A. o. budaki*, and *A. o. ibrahimi* from southwestern Anatolia are similar to *A. d. pelasgiana*. Çevik et al. (2006) recognized 2 subspecies of *A. danfordi*. They also stated that based on univariate and multivariate analysis methods, the Tınaztepe (Konya) population represents a subspecies of *A. d. bileki*, and both the Çamlıyayla and Sebil (Mersin) populations represent *A .d. danfordi*. In this study, the Doğanhisar (Konya) specimens were collected together with *Parvilacerta parva* specimens at an elevation of 1765 m a.s.l. The pholidosis characters and morphometric measurements of the *A. danfordi* specimens examined in this study are given in Table 4.

Ophisops elegans was found to be a common species in the Sultan Mountains. Many studies have been published on its taxonomic status in Anatolia (Lantz, 1930; Müller, 1933; Bodenheimer, 1944; Baran and Budak, 1978; Baran, 1982; Tok, 1992, 1993; Tok et. al., 1996, 1997). The central Anatolia population of this species was described as *O. e. centralanatoliae* by Bodenheimer (1944). Later, a new subspecies from Alanya, *O. e. basoglui*, was described by Baran and

Table 3. The pholidosis characters and morphometric measurements of *Trachylepis vittata* specimens examined in this study.

	♂♂ + ♀♀					
	N	M	Min	Max	SE	SD
Number of midbody scales	18	32.06	31	33	0.42	0.09
Subdigital lamellae	18	16.94	15	19	1.06	0.25
Supralabials	18	7	7	7	-	-
Snout + vent length	18	75.11	48.54	87.92	10.83	2.55
Frontal length	18	3.77	3.08	4.41	0.37	0.08
Head length	18	12.89	11.02	14.23	0.78	0.18
Snout + vent length/head length	18	5.80	3.93	6.57	0.65	0.15
Tail length	12	93.00	69	116	16.06	4.64
Tail length/snout + vent length	12	1.27	0.81	2.16	0.32	0.09

Table 4. The pholidosis characters and morphometric measurements of *Anatololacerta danfordi* specimens examined in this study.

	♂♂ + ♀♀ + juv.					
	N	M	Min	Max	SE	SD
Supraciliar granules (right)	27	12.33	9	22	0.44	2.30
Supralabials	27	8.74	8	10	0.27	1.40
Collars	27	11.30	8	14	0.26	1.35
Longitudinal series of ventral	27	29.04	27	31	0.28	1.45
Dorsalia	27	53.93	48	63	0.69	3.57
Femoral pores (left)	27	17.93	15	21	0.32	1.64
Subdigital lamellae	27	26.04	20	29	0.34	1.76
	♂♂ + ♀♀					
Pileus lengths	23	15.52	12.65	18.51	0.37	1.79
Pileus width	23	6.92	5.92	8.24	0.14	0.70
Total body length	14	175.79	128	219	7.75	28.90
Tail length	14	110.21	67	151	7.04	26.30
Pileus index	23	43.14	41	48	-	-
Tail index	23	62.07	53	69	-	-

Budak (1978). Consequently, the western Anatolian population of *O. elegans* was determined by Baran (1982) to be *macrodactylus*, which was formerly accepted as a synonym of *O. e. ehrenbergi* (Wiegman, 1835). The Konya population was included in *O. e. centralanatoliae* by Tok (1992) as Ankara and Kayseri populations. He also encountered some specimens that resembled *O. e. centralanatoliae* and *O. e. macrodactylus* in the vicinity of Beyşehir. Later, 2 forms from this locality (*centralanatoliae* and *macrodactylus*) were maintained sympatrically by Tok (1993). In our studym the *centralanatoliae* form was recorded in Sağırköy and Aslandoğmuş, and the *macrodactylus* form was recorded in Bağkonak, Dereçine, Doğanhisar, and Hüyük. We also found these forms sympatrically in a new locality (Sücüllü, Isparta) once more.

The *Typhlops vermicularis* specimens examined in this study were collected from Pınarkaya (Sultandağ, Afyon) at an elevation of 1150 m a.s.l. In all specimens, the color of the dorsum was yellowish-brown and the venter was yellowish. The number of supralabials was 3 and the mean number of scales around the body and the tail was 23 (22-24) and 20.33 (20-21), respectively. The mean total body length of the specimens was 231.80 (198-262) mm. The morphological features of the specimens collected for the first time from this locality resemble those of *T. vermicularis* specimens recorded previously by a number of researchers (Baran, 1976; Baran and Atatür, 1998; Kumlutaş et al., 2004b).

The female *Elaphe sauromates* specimens, which displayed the typical morphological characteristics of their species, were collected from the Dereçine (Afyon) region. Among the collected specimens, the number of subralabials is 8, loreals 1, the number of dorsal scales at midtrunk between the 85th and 100th ventral plates was 25, with 67 subcaudals. The tail length of the specimens was 25 mm.

A total of 2 juvenile *Telescopus fallax* specimens were collected from Cumhuriyet (Afyon) and Taşlıca (Afyon). Both specimens had 2 anal plates, 1 preoculare and frenale, 2 postocularia, 7 supralabials, and 2 + 4 temporalia in the Cumhuriyet specimen and 3 + 4 in the Taşlıca specimen. There were 19 dorsal scales at midtrunk between the 90th and 115th ventral plates. The numbers of ventralia and subcaudals were 214 and 62 in the Cumhuriyet specimen and 208 and 63 in the Taşlıca specimen. The number of maculations on the dorsum and flanks of the body were 48 and 54, respectively. According to Baran et al. (2005), the number of ventral plates, anal plates, and maculations on the dorsum differs among subspecies of *T. fallax*. Our specimens displayed similarities to the nominate, having 2 anal plates and the same number of maculations on the dorsum. The ventral counts of the Cumhuriyet specimen also fall within the range of the nominate subspecies, whereas this value in the Taşlıca specimen, 208, falls within the range (200-213) of the *T. fallax iberus* (Eichwald, 1831) subspecies, as defined by Baran et al. (2005). The subcaudal counts of the Cumhuriyet specimen (62) and the Taşlıca specimen (63) overlap with the ranges of *T. fallax iberus* (56-66) and *T. f. fallax* (56-83).

According to Başoğlu and Baran (1980), *Zamenis hohenackeri* has 2 subspecies in Turkey (*Z .h. hohenackeri* Strauch, 1873 and *Z. h. taurica* Verner, 1898). Başoğlu and Baran (1998) stated that the light mid-dorsal line is absent in *Z. h. taurica*. Our specimen showed similarities to *Z. h. taurica* in terms of dorsal pattern characteristics. The morphological characters of the female specimen agreed with those of the *Z. h. taurica* specimens in Baran's study (1976). The ventral counts of the female *Z. h. taurica*, however, were reported as 218, (221), 226 in Baran (1976), a value that was found to be lower (211) in our study.

Based on their distributions, the species recorded in the Sultan Mountains can be arranged into 10 chorotypes (Vigna Taglianti et al., 1999; Sindaco et al., 2000; Fet and Popov, 2007) (Table 5). The percentage values are reported in Figure 2. The Sultan Mountains lie from the northwest to southeast. The southern slopes are affected by the Mediterranean transition

Table 5. Chorotype classification of amphibians and reptiles in the Sultan Mountains.

Chorotype	Amphibia	Reptilia	Species
European	1		*Bufo bufo*
Turano-Europeo-Mediterranean	2	1	*Pelophylax ridibundus* complex *Pseudepidalea viridis*, *Emys orbicularis*
Europeo-Mediterranean	1		*Hyla arborea*
Endemic		2	*Anatololacerta danfordi*, *Parvilacerta parva*
Turano-Mediterranean		6	*Testudo graeca*, *Pseudopus apodus, Typhlops vermicularis*, *Hierophis caspius Elaphe sauromates*, *Telescopus fallax*
Mediterranean		3	*Hemidactylus turcicus*, *Trachylepis vittata*, *Malpolon monspessulanus*
E. Mediterranean		6	*Laudakia stelli*, *Cyrtopodion kotschyi*, *Lacerta trilineata*, *Ophisops elegans Ablepharus kitaibellii*, *Montivipera xanthina*
SW-Asiatic		5	*Rana macrocnemis*, *Trachylepis aurata*, *Hierophis schmidti*, *Eirenis modestus*, *Zamenis hohenackeri*
Central Asiatic-Europeo-Mediterranean		1	*Natrix natrix*
Central Asiatic-European		1	*Natrix tessellata*
Total species	5	23	

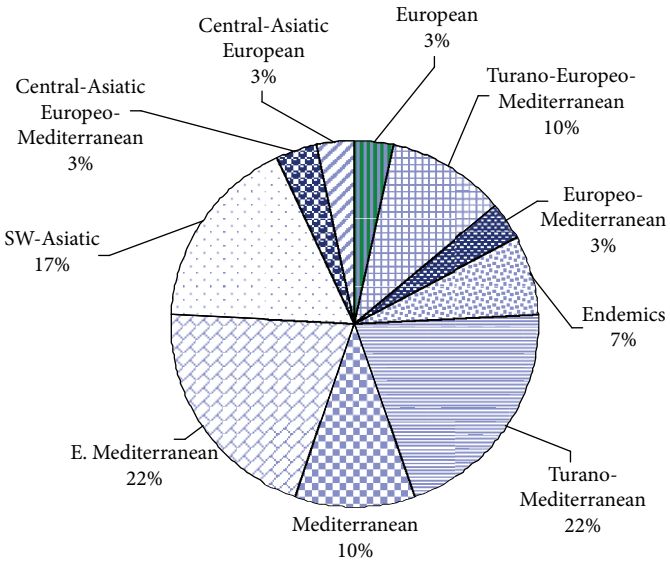

Figure 2. Percentages of the main chorotypes of the Sultan Mountains.

zone and the northern slopes are affected by the climate of the inner Anatolian region (Atalay, 2002). Due to the geographical position of the Sultan Mountains, it is not surprising that 54% of the species found there belong to the Eastern Mediterranean (22%), Turano-Mediterranean (22%), and Mediterranean (10%) chorotypes. The SW-Asiatic (17%), Turano-Europeo-Mediterranean (10%), and Endemic (7%) chorotypes are represented by 5, 3, and 2 species, respectively. The European (3%), Europeo-Mediterranean (3%), Central Asiatic-Europeo-Mediterranean (3%), and Central Asiatic-European (3%) chorotypes are represented by 1 species each (Figure 2). The most common amphibians are *Pelophylax ridibundus* (N = 82) and *Pseudepidalea viridis* (N = 32). *Bufo bufo* was found in only one locality in the research area (N = 5). The most common reptiles are *Lacerta trilineata*, *Ophisops elegans, Anatololacerta danfordi* (strictly endemic to Anatolia), *Testudo graeca*, *Eirenis modestus*, and *Natrix natrix*. However, *Pseudopus apodus*, *Hemidactylus turcicus*, *Hierophis schmidti*, *Zamenis hohenackeri*, *Elaphe sauromates*, *Malpolon monspessulanus*, and *Telescopus fallax*, although very rare, occur in low numbers along the borders of the mountain. With respect to herpetofauna, the northern slopes of the Sultan Mountains are more accessible than the southern slopes. Dereçine, situated on the northern slopes of the Sultan Mountains, is the most important area for amphibian and reptile species since it covers habitats suitable for the feeding and dwelling of amphibian and reptile species. Among the species identified in this study, 72.41% were found in Dereçine. Therefore, we propose that this area should be considered for the establishment of protected natural areas.

Acknowledgements

This study received financial support from Celal Bayar University (No. FEF 2002-006).

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