

1-1-2000

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UĞURTAŞ, İSMAİL HAKKI; YILDIRIMHAN, HİKMET SAMİ; and ÖZ, MEHMET (2000) "Herpetofauna of the Eastern Region of the Amanos Mountains (Nur)," *Turkish Journal of Zoology*. Vol. 24: No. 3, Article 5. Available at: <https://journals.tubitak.gov.tr/zoology/vol24/iss3/5>

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Herpetofauna of the Eastern Region of the Amanos Mountains (Nur)

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Received: 16.11.1998

Abstract: In this study, Herpetofauna of the eastern region of the Amanos mountains in Turkey was investigated. A total of 319 samples were collected and 27 species from 17 amphibian and reptile families were described. Two of these species are urodeles, three are anurans, two are turtles, eleven are lizards and eight are snakes.

Key Words: Herpetofauna, East of Amanos Mountains

Amanos (Nur) Dağlarının (Hatay) Doğu Bölgesinin Herpetofaunası

Özet: Bu çalışmada, Amanos dağlarının doğusunda kalan bölgenin herpetofaunası araştırılmıştır. Yapılan araştırmalarda bölgeden 17 Amphibi ve Reptil familyasından 27 ayrı türe ait toplam 319 örnek temin edilerek incelenmiştir. Bu türlerden ikisi kuyruklu kurbağa, üçü kuyruksuz kurbağa, ikisi kaplumbağa, onbiri kertenkele ve sekizi yılanlar grubundandır.

Anahtar Sözcükler: Herpetofauna, Amanos Dağlarının Doğu bölgesi

Introduction

A list of the amphibians and reptiles of Turkey has previously been published by Baran (1). After the list was examined, samples from different regions of the country were collected at random. The collected samples were compared with each other and duplicates were discarded from the study.

Currently, studies show that certain Herpetofauna belonging to a particular city or range has increased (2-12). Some regions from which samples have been collected have had too few stations, causing some difficulty in introducing the Herpetofauna of that region. Collecting samples from a greater number of stations in those areas has lessened the difficulty.

New species have been introduced to neighbouring regions or countries such as Anatolia, East Turkistan, Greece, Bulgaria and Persia (13-18). Based on these publications, the study of Herpetofauna introducing detailed information about amphibians and reptiles is important in these regions and in the eastern region of the Amanos Mountains of Turkey.

The climate of the province is of humid and subhumid Mediterranean type, with annual precipitation between

570 and 1200 mm and mean maximum temperature of the hottest month (August) between 30 and 36 °C. It is situated in Thermo-Mediterranean and Eu-Mediterranean vegetation zones (19). It is interesting to note that the province, especially the coastal zone of the Mediterranean, is a natural pathway used by afro-eremial faunistic elements to move into Anatolia. In addition, the Amanos mountain range is accepted as a typical barrier (or bordea) for the distribution of syrio-exemial faunal elements in the west or for that of the Mediterranean faunal element in the east (20,21). Also, this mountain range is accepted as a part of the hypothetical Anatolian Diagonal which possibly affected the faunal structure of Anatolia (20).

Thus, we believe that determination of the herpetofauna of Hatay will make an important contribution to the fauna of Turkey.

Materials and Methods

The material (a total of 319 samples) used in our study, are kept in the Department of Biology, Science and Arts Faculty, Uludağ University. The samples were

collected at different times. However, all have been preserved according to standard methods (9).

Identification of the amphibian and reptile species collected from the areas of study were made by utilizing available published literature (22-28). The total of 27

species identified consists of 17 families of amphibia and reptiles: 5 amphibia, 2 turtles, 11 lizards and 8 snakes. The localities of the samples collected are shown in the Figure. In addition to the map, a list of species found in each area is shown below. The numbers in parentheses

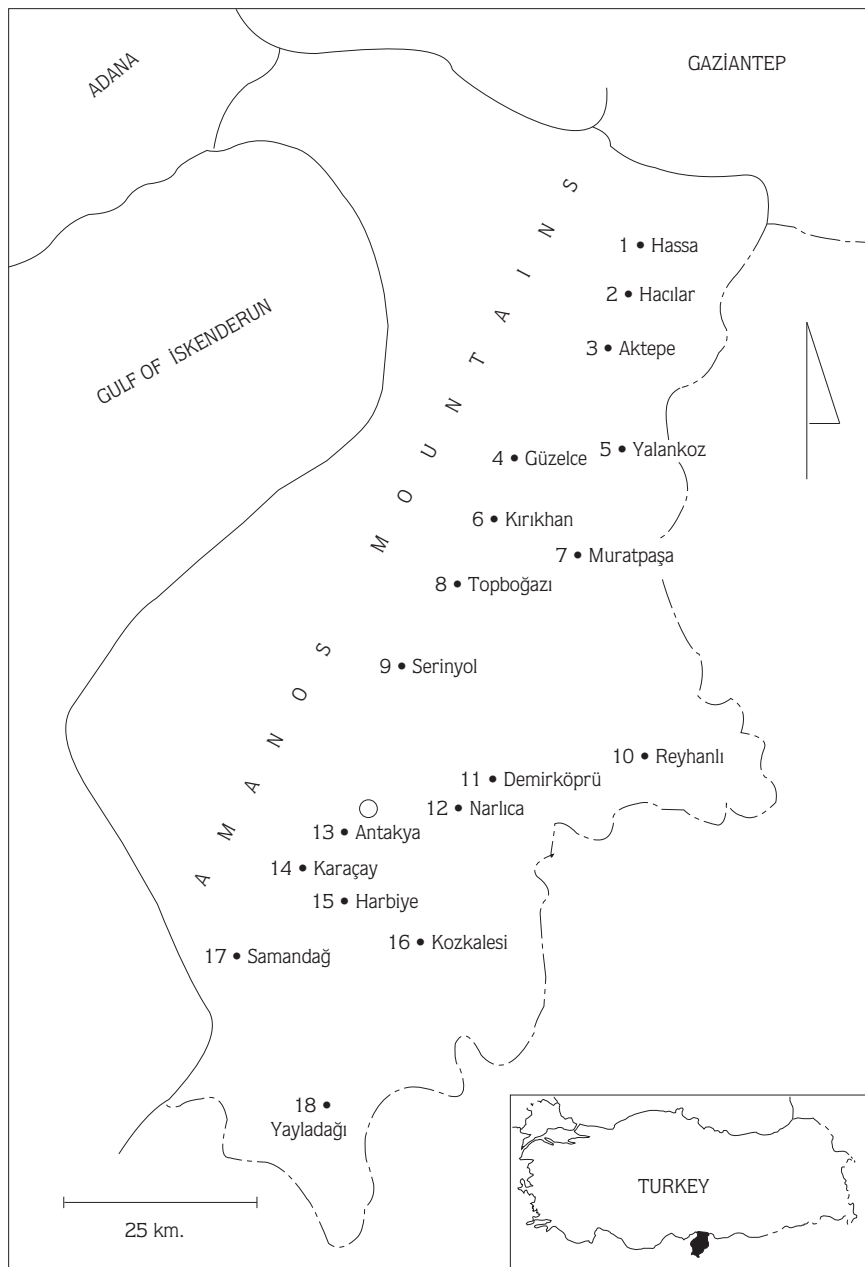


Figure 1. Material collecting localities: 1- Hassa, 2- Hacilar, 3- Aktepe, 4- Güzelce, 5- Yalankoz, 6- Kırıkhan, 7- Muratpaşa, 8- Topboğazi, 9- Serinyol, 10- Reyhanlı, 11- Demirköprü, 12- Narlıca, 13- Antakya, 14- Karaçay, 15- Harbiye, 16- Kozkalesi, 17- Samandağ, 18- Yayladağ

identify a particular region on the map where that species was located.

Salamandra salamandra (15); *Triturus vittatus* (5,6); *Rana ridibunda* (1,3,4,6); *Bufo viridis* (1,3,4,6,16,17); *Hyla savignyi* (1,3,5,6,7,17); *Mauremys caspica* (5,6); *Testudo graeca* (6); *Cyrtopodion kotschy* (2,16); *Hemidactylus turcicus* (6); *Laudakia stellio* (2,6,8,10,12,15,18); *Ophisaurus apodus* (16); *Lacerta trilineata* (18); *Lacerta laevis* (4,6,7,11,13,15,16); *Ophisops elegans* (2,4,6,8,18); *Ablepharus kitaibeli* (5,8,16); *Mabuya vittata* (1,4,6,9,14,16,17,18); *Chamaeleo chamaeleon* (6); *Blanus strauchi* (16,17,18); *Typhlops vermicularis* (1,6,16); *Eryx jaculus* (6); *Coluber jugularis* (6,7,16,18); *Coluber najadum* (10); *Eirenis modestus* (16,18); *Eirenis rothi* (6); *Malpolon monspessulanus* (2,15); *Natrix tessellata* (6,7,11,13); *Vipera lebetina* (17).

List of the species

Familia: Salamandridae

Salamandra salamandra (Martens) 1885

Material N = 17: 9 ♂♂, 8 ♀♀

Triturus vittatus (Gray) 1835

Material N=7: 1 ♂, 6 ♀♀

Familia: Ranidae

Rana ridibunda Pallas, 1771

Material N=24: 9 ♂♂, 12 ♀♀, 1 juv.

Familia: Bufonidae

Bufo viridis Laurenti, 1768

Material N=36: 22 ♂♂, 14 ♀♀

Familia: Hylidae

Hyla savignyi (Audoin) 1827

Material N=29: 21 ♂♂, 8 ♀♀

Familia: Emydidae

Mauremys caspica (Gmelin) 1774

Material N= 16: 7 ♂♂, 9 ♀♀

Familia: Testudinidae

Testudo graeca Linnaeus, 1758

Material N= 4: 2 ♂♂, 2 ♀♀

Familia: Gekkonidae

Cyrtopodion kotschy (Steindachner) 1870

Material N= 2: 2 ♂♂

Hemidactylus turcicus (Linnaeus) 1758

Material N= 4: 2 ♂♂, 2 ♀♀

Familia: Agamidae

Laudakia stellio (Linnaeus) 1758

Material N= 36 : 13 ♂♂, 23 ♀♀

Familia: Anguidae

Ophisaurus apodus (Pallas) 1775

Material N= 1 : 1 ♂

Familia: Lacertidae

Lacerta trilineata Bedriaga, 1886

Material N= 3 : 1 ♂, 2 juv.

Lacerta laevis Gray, 1838

Material N= 23: 17 ♂♂, 6 ♀♀

Ophisops elegans Menetries, 1832

Material N= 21: 10 ♂♂, 11 ♀♀

Familia: Scincidae

Ablepharus kitaibeli (Bibron-Bray) 1832

Material N= 5: 3 ♂♂, 2 ♀♀

Mabuya vittata (Oliver) 1804

Material N= 32: 18 ♂♂, 14 ♀♀

Familia: Chamaeleonidae

Chamaeleo chamaeleon (Linnaeus) 1758

Material N= 2: 1 ♂, 1 ♀

Familia: Amphisbaenidae

Blanus strauchi (Bedriaga) 1884

Material N= 13: (13 ♂♂ + ♀♀)

Familia: Typhlopidae

Typhlops vermicularis Merrem, 1820

Material N= 17: (17 ♂♂ + ♀♀)

Familia: Boidae

Eryx jaculus (Linnaeus) 1758

Material: N= 1: 1 ♀

Familia: Colubridae

Coluber jugularis Linnaeus, 1758

Material N= 5: 5 juv.

Coluber najadum (Eichwald) 1831

Material N= 1: 1 ♀

Eirenis modestus (Martin) 1838

Material N= 6: 2 ♂♂, 3 ♀♀, 1 juv.

Eirenis rothi Jan 1863

Material N= 6: 5 ♀♀, 1 juv.

Malpolon monspessulanus (Hermann) 1804

Material N= 2: 2 ♀♀

Natrix tessellata (Laurenti) 1758

Material N= 5: 1 ♂, 2 ♀♀, 2 juv.

Familia: Viperidae

Vipera lebetina (Linnaeus) 1758

Material N= 1: 1 juv.

Discussion and Conclusion

During the later part of the study of herpetofauna, new species and subspecies were introduced. Therefore, detailed investigations of amphibia and reptiles in the study regions proved to be valuable.

When the study began, 27 of the known 33 species of amphibia and reptiles were identified in the research area. The species listed in the literature which could not be located in the research area include: *Pelobates syriacus*, *Bufo bufo*, *Trionyx triunguis*, *Chalcides ocellatus*, *Eumeces schneideri*, *Eirenis collaris*, *Eirenis lineomaculatus*, *Rhyncocalamus melanocephalus* and *Telescopus fallax*. The reptile species (*Ophisaurus apodus* and *Coluber najadum*) not listed in the literature were found and identified in the research area for the first time. Therefore, the number of species now known to be living in the research area is 36.

The importance of this study lies in the discovery of 3 additional species in the area of research. The introduction and identification of amphibia and reptiles living in the area of research will influence biological diversification and faunistic studies in the future.

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