On the Occurrence of the Black Cat Snake, Telescopus nigriceps (Ahl, 1924) (Serpentes: Colubridae) from the Southeastern Anatolia, Turkey with some taxonomical comments

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Abstract. This is the first report of the occurrence of *Telescopus nigriceps* in SE Anatolia. Four specimens were collected from two different localities, Kilis and Sanliurfa Provinces. In the later locality the species was found in sympatry with the closely related taxon, *Telescopus fallax syriacus* (Boettger, 1880). Since so little information is available on this rare cat snake, the species description is revised in detail, based on the newly collected specimens and the limited information given by different authors from its previously known distribution area. In light of the newly obtained data, its taxonomic status was discussed in comparison to neighboring and sympatric taxa.

Key Words: Telescopus nigriceps, Telescopus fallax syriacus, taxonomy, SE Anatolia.

Introduction

southeastern Anatolia located at an important transitional zoogeographical region (Irano-Turanian) between the eastern Mediterranean region and southwestern (Saharo-sindian). Asia Syroeremic herpetofaunal elements such Cyrtopodion scaber (Heyden 1827), Stenodactylus grandiceps Haas, 1952, Asaccus elisae (Werner 1895), Eirenis coronella (Schlegel 1837) and Spalerosophis diadema (Schlegel 1837) are known from sites of semi-arid conditions of the northern reaches in the Mesopotamian plain of the Turkish-Syrian border region (Göçmen et al. 2002). Therefore, it is not surprising that our herpetological trips in April/May to the SE Anatolia have produced a newly recorded snake for the Turkish Herpetofauna. It is necessary to note, however, that such new records are informative in clarifying the distribution, ecology, evolutionary and zoogeographical tendency, etc. of species.

The genus *Telescopus* Wagler 1830 is comprised of various species and

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subspecies distributed throughout Africa, southwestern Asia and southeast Europe (Leviton et al. 1992, Baha El Din 2006). A single species, Telescopus fallax (Fleischman 1831) is found in the southwestern Asia and southeast Europe, including Cyprus and Anatolia (Budak & Göçmen 2005, Baran et al. 2005). Another Telescopus species, Telescopus nigriceps (Ahl 1924) is known from the adjacent southern countries of Turkey - southern Syria (Martens 1993), Jordan (Haas 1943; Disi 1985, Disi et al. 1988) and central Iraq (Ahl 1924, Schmidt 1939). The northernmost locality of the species was previously recorded as the Homs province (Damascus-Palmyra road, 70 km W of Palmyra) by Martens (1993).

As indicated by Zinner (1977) taxonomic problems usually occur in groups of closely related species or subspecies, especially if described from a limited number of specimens collected at geographically distinct localities. Often, many species of animals are described based on a single specimen as is the case for Telescopus nigriceps (Ahl 1924). The holotype was collected by V. Oppenheim in "central Mesopotamia" (without giving detailed location). Although different individuals were later reported by Schmidt (1939)-Ar Ruthbah/Iraq, Haas (1943)-Amman/Jordan and Martens (1993)-Homs and Suweida provinces of southern Syria. Only five preserved specimens are known including the holotype and the description is short and not exclusive. Recently, Disi et al. (2001) have reported that T. nigriceps occurs, together with a closely related form in Jordan, listed for years as *T. fallax syriacus* (Disi 1985), to which it does not belong. The diagnostic characters of the species are based on the coloration and pattern (black head and black cross bands reaching to ventrals on the body and tail).

The main objective of this study is to present a detailed description of the new specimens collected by us from the SE Anatolia which we identified as *Telescopus nigriceps* and to note the taxonomic problems of this taxon.

Material and Methods

Two scientific excursions were conducted to the SE Anatolia between the months April and June, 2007. Four specimens belonging to *Telescopus* cf. *nigriceps* were collected from the region. Specimen capture localities are shown in Fig. 1.

All specimens were anesthetized with ether, fixed by 96% ethanol injection into the body cavity and deposited in 70% ethanol (Tosunoglu et al. 2002). This method was selected to allow the possibility of utilizing specimens for DNA studies in the future. The specimens were numbered and deposited in Zoology Department of Ege University (ZDEU). In addition to the collected specimens of *Telescopus nigriceps*, we evaluated 21 specimens belonging to some of the different subspecies of *Telescopus fallax* to make comparisons with the closely related species known from Anatolia and Cyprus. The list of the material examined as follows:

Telescopus nigriceps (n=4): ZDEU 128/2007, 1♂, 1♀, Küplüce (Bagita Mountain), Kilis Province, Turkey, 25.04.2007, leg. B. Göçmen, M. Z. Yildiz, D. Yalçinkaya, B. Akman; ZDEU 130/2007, 1♂, Akmagara (Tektek Mountain), Sanliurfa Province, Turkey, 28.04.2007, leg. B. Göçmen, M. Z. Yildiz, D. Yalçinkaya, B. Akman; ZDEU 174/2007, 1♀, Polateli (Hayberi Mountain), Kilis Province, Turkey, 29.05.2007,

leg. B. Göçmen, M. Z. Yildiz, D. Yalçinkaya, B. Akman.

Telescopus fallax syriacus (n=1): ZDEU 129/2007, 1♀, Akmagara (Tektek Mountain), Sanliurfa Province, Turkey, 28.04.2007, leg. B. Göçmen, M. Z. Yildiz, D. Yalçinkaya, B. Akman.

Telescopus fallax fallax (n=8): ZDEU 181/2001, 1♀, Bebek, Istanbul Province, Turkey, 01.08.2001, leg. D. Ulasoglu; ZDEU 128/2003, 1♀, Harmandali-Akhisar, Manisa Province, Turkey, 27.09.2003, leg. K. Çiçek; ZDEU 35/2004, 2♀, Bagyolu Köyü, Manisa Province, Turkey, 25.04.2004, leg. K. Çiçek, H. Koç; ZDEU 34/2004, 1♀, Ayvacik Köyü, Manisa Province, Turkey, 25.04.2004, leg. K. Çiçek, H. Koç; ZDEU 36/2004, 1♀, Bespinar Köyü, Izmir Province, Turkey, 01.05.2004, leg. K. Çiçek; ZDEU 37/2004, 1♂, Çigli, Izmir Province, Turkey, 06.06.2004, leg. K. Çiçek, H. Bahar; ZDEU 38/2004, 1♂, Izmir Province, Turkey, 01.10.2004, leg. K. Çiçek.

Telescopus fallax cyprianus (n=12): ZDEU 115/1960, 1♀, Gönyeli, Nicosia Province, Cyprus, 12.09.1960, leg. Ö. K.Gülen; ZDEU 19/1996, 2♀, Gönyeli, Nicosia Province, Cyprus, 25.04.1996, leg. B. Göçmen; ZDEU 5/2002, 2♂, Gönyeli, Nicosia Province, Cyprus, 19.03.2002, leg. B. Göçmen; ZDEU 35/2003, 1♀, Dörtyol, Famagusta Province, Cyprus, 27.07.2003, leg. B. Göçmen, H. Bahar; ZDEU 127/2007, 6♀, Karpas Province, Cyprus, 04.04.2007, leg. B. Göçmen, M. Z. Yildiz, D. Yalçinkaya, B. Akman.

The following meristic pholidolial and pattern (blotches-cross bands) characteristics were taken: number of supralabials (SpL) and (SbL), sublabials preoculars postoculars (PsO), Frenals (F), Temporals (T); number of dorsals on body one head length posterior of the head (DPH), dorsals midbody (DMB), dorsals one head length anterior of the anal plate (DA); ventrals (V), anals (A), subcaudals (SC), and the number of blotches or crossbands on the mid-dorsum of body (B-BCB) or tail (T-BCB). Metric dimensions measured are: Snout-vent length (SVL); tail length (TL), pileus length (PL), pileus width (PW); rostral depth (RoD), rostral width (RoW); frontal length (FL), frontal width (FW); parietal length (PaL), parietal width (PaW); horizontal orbit diameter (HOD). For bilateral features measurements taken on the right side were used in most cases.

Pholidolial features were determined under a stereo-microscope and morphological measurements, except SVL (Snout-vent length) and TL (Tail length), were taken using digital calipers (Mitutuyo 500-181 U) with an accuracy of 0.01 mm. SVL and TL were measured to the nearest millimeter using a ruler. The geographic position of each sampling site of *Telescopus nigriceps* was located by a GPS (Fig. 1).

The colour and colour-pattern characteristics of specimens were recorded while they were still alive; colour photos were taken of the living animals. The terminology used in describing the specimen conforms to Nilson & Andrén (1986) and Dowling's (1951) system.

Data were summarized and analyzed using SPSS 11.0 for windows. The Mann-Whitney U (for pholidolial counts) and Student t-test (for meristic characters) were utilized to compare differentiation in each population. The level for statistical significance was set at $P \le 0.05$.

Results

The four specimens of Telescopus nigriceps in question were found during both night and day excursions in sparsely vegetated arid land near to water resources (stream and pond) in three different localities from Kilis and Sanliurfa provinces (Fig.1). The Kilis specimens were collected from the western and southern slopes of the volcanic Bagita Mountain and Hayberi Mountain, the habitat at both sites comprised loose substrate covered with small boulders (Fig. 2). In these biotopes, Lacerta cappadocica schmidtlerorum Eiselt 1979, Eumeces schneideri (Daudin 1802), Mabuya

aurata (Linneaus 1758), Stenodactylus grandiceps Haas 1952, Cyrtopodion heterocercus (Blanford 1874), Laudakia stelio (Linneaus 1758), Platyceps najadum (Eichwald 1831), Macrovipera lebetina (Linneaus, 1758), Typhlops vermicularis Merrem 1820, Leptotyphlops macrorhynchus (Jan, 1862) and Eirenis eiselti Schmidtler & Schmidtler 1978 were observed. Together with other sympatric reptiles (Trapelus ruderatus

(Olivier 1804), Eirenis eiselti, Leptotyphlops macrorhynchus, Telescopus fallax syriacus), the Sanliurfa specimen was recorded at the southern extension of Tektek Mountain in a semiarid biotope with consolidated substrate enriched by clay-limestone, covered with small boulders near a dried stream mattress during the day time.

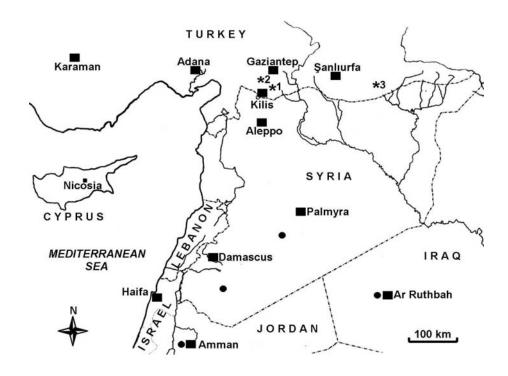


Figure no.1 Map showing the new localities (asterisks) and previously known localities (solid circles) for *Telescopus nigriceps*.

1: Küplüce (Bagita Mountain, 613 m, 36°44′49″N, 37°15′04″E)-Kilis,

2: Polateli (Hayberi Mountain, 830 m, 36°50′44″N, 37°06′45″E)-Kilis,

3: Akmagara (Tektek Mountain, 498 m, 36°56′27″N, 39°27′57″E)-Sanliurfa.



*Figure no.*2 General aspect of the habitat of *Telescopus nigriceps* from Bagita Mountain, Kilis (altitude 613 m, 36°44′49″N, 37°15′04″E).

Since so little information – including its original description by Ahl (1924) - is available on this rare snake, the data obtained from our specimens are presented detailed in here (Tab. 1) with data for a single specimen of closely related subspecies, *Telescopus fallax syriacus* found in sympatry.

Head distinct from neck, snout bluntly pointed, eye with black iris, pupil vertical, body relatively plump and head slightly broader than that of *Telescopus fallax syriacus* (Fig. 3). Loreal elongate, entering the eye below a preocular; 8 supralabials, 3rd, 4th and 5th enter eye. 180 (+2)-190 (+3) ventrals, 52-65 subcaudals, dorsals smooth and dorsal scale formula is 18(+1)-19-15. Nuchal band, also cross

bands on dorsum of body and tail are entirely coal black in all specimens. We detected a head color polymorphism in Telescopus nigriceps collected by us. The dorsal side of head is relatively lighter coal black with very small pinkish gray dots in one specimen from Kilis. In the two other specimens from Kilis, head is fundamentally pinkish (Fig. 3, b and d) and gray with black dots or spots. The later case is valid for the Sanliurfa specimen found in sympatry with Telescopus fallax syriacus (Fig. 3f). However, in *T. f. syriacus* specimen the head is entirely silvery light brown in color. The ground color of the dorsal side of the body and tail is pinkish gray in all specimens of T. nigriceps,

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whereas in T. f. syriacus it is light brown above, which becomes more dark appearance gradually in medialdorsal line (Fig. 3f). There are also 25-28 and 10-15 coal black cross bands on body and tail, respectively. These cross bands run by degrees narrower and reach to the black venter in a very high proportion (an average of 92.77%) on both sides (Fig. 3d). In T. f. syriacus specimen, there are 27 and 13 middorsal blackish brown blotches (instead of cross bands) on body and tail, respectively. These blotches are connected by vertical or oblique narrower lines reaching to blackish brown spotted venter in a low proportion (22.22%) on the 1/4 anterior part of the body. On the rest of the body, the lateral lines are not connected with the mid-dorsal blotches. Therefore, they do not form cross bands. The ventral side of the head of newly collected specimens of *T. nigriceps* is pinkish white with more or less blackish dot and spots (Fig. 4) and the arms of nuchal band are not fused in the mid-gular region. Whereas the ventral side of the head of T. f. syriacus is yellowish dirty white and the nuchal band is fused in the gular region. The color of the venter is almost black, dashed with pinkish gray spots and blotches in *T. nigriceps*. However, there is a longitudinal blackish brown medial-ventral zone surrounded by yellowish dirty white marginal regions in *T. f. syriacus*.

The four new specimens belonging to *Telescopus nigriceps* from SE Anatolia extend the known range of the species some 330 km and 380 km to the north

and the north-east, respectively from its previous northernmost locality of Homs province, Syria (Martens 1993).

All characteristics of our specimen of Telescopus fallax syriacus agree with those reported for specimens from Palestine (Zinner 1977) and SE Anatolia (Baran et al. 2005). Since we only had a single specimen of T. f. syriacus we were not able to make any statistical analyses between the two closely related species, T. nigriceps and T. fallax syriacus. Therefore, we used the zoogeographically neighboring populations of different subspecies of T. fallax; T.fallax fallax from the Mediterranean Anatolia and T. fallax cyprianus from Cyprus to compare our results. Descriptive data belonging to our specimens are given in Tab. 2. Comparing the features of these taxa with the Mann Whitney U and Student t-test reveals statistically significant differences in many characteristics (Tab. 2).

Telescopus nigriceps can be distinguished from all neighboring subspecies of Telescopus fallax by the following combination of characters; relatively plump body, in a high proportion (average 92.77%) regular and coal black cross bands which fuse with the black venter, coal black-blackish gray or pinkish gray head, pinkish gray ground color of dorsum, almost black venter dashed with pinkish gray spots and blotches. T. nigriceps is also distinctly different from its continental neighbor *T*. fallax fallax by the numbers of temporals (T), subcaudals (SC), blotches on dorsum of body (B-BCD) and the numbers of ventrals (V) (Tab. 2).

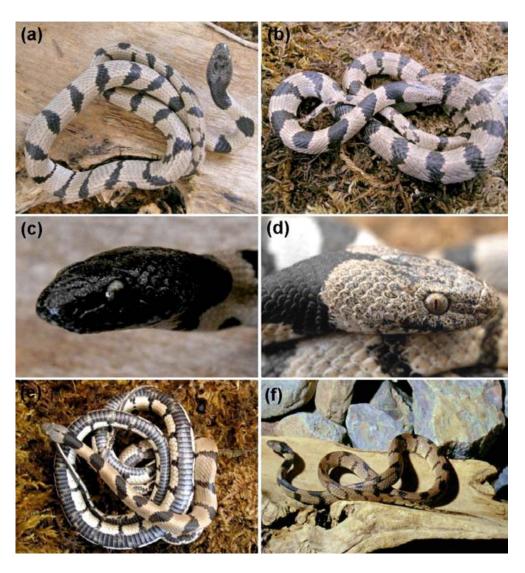


Figure no.3 General and head aspects of Telescopus nigriceps (a-e) and Telescopus fallax syriacus (f) found from the SE Anatolia (Kilis & Sanliurfa provinces). The animals in a-c and b-d are same animals collected from the same locality of Kilis province at the same time.

The photos in e and f are animals found from Sanliurfa province in sympatry.



Figure no. 4 The head aspects (dorsal, ventral and lateral) of the *Telescopus nigriceps* (left series) and *T. fallax syriacus* (right series) specimens from SE Anatolia taken soon after fixation.

Table no.1 The meristic pholidolial (L/R), pattern (blotches-crosbands) characteristics and metric dimensions obtained from the four *Telescopus nigriceps* (TN) and one sympatric *T. fallax syriacus* (TFS) specimen.
The explanations of the other abbreviations are given in the Materials and Methods.

Taxa	TN	TN	TN	TN	TFS
Specimens	128/2007-1 ₃	128/2007-2	174/2007-1♀	130/2007-13	129/2007-1
(ZDEU nos.)	Bagita, Kilis	Bagita, Kilis	Hayberi, Kilis	Tektek, Sanliurfa	Tektek, Sanliurfa
SpL	8/8	8/8	8/8	8/8	8/8
SbL	10/10	10/11	10/10	11/11	9/9
PrO	1/1	1/1	1/1	1/1	1/1
PsO	2/2	2/2	2/2	1/1	2/2
F	1/1	1/1	1/1	1/1	1/1
T	2/2	2/2	2/2	2/2	2/2
DPH	18	18	19	19	19
DMB	19	19	19	19	19
DA	15	15	15	15	15
\mathbf{V}	180+2	186+2	184+2	190+3	196+2
A	2	2	2	2	2
SC	52	56	56	65	55
B-BCD	28	28	26	25	27
T-BCD	10	10	11	15	13
SVL	510	338	349	305	561
TL	83	66	71	61	100
PL	15.24	10.02	10.18	9.49	13.94
PW	7.45	5.18	4.32	4.68	6.25
RoD	2.41	1.28	0.99	1.16	1.45
RoW	3.4	2.33	2	2.22	2.72
FL	5.16	4.09	4.02	3.6	4.74
FW	4.93	2.97	3.42	2.91	4.31
PaL	6.79	4.51	4.31	4.6	6.31
PaW	4.47	2.94	3.12	3.15	3.99
HOD	3	2.26	2.13	2.33	2.92

In addition to these characters, differences between *T. nigriceps* and the related taxon *T. fallax cyprianus*, are seen in many meristic pholidolial characters (SbL, DPH, DMP, DA, SC, T-BCB), as

indicated in Tab. 2. However, the data obtained from our *T. fallax syriacus* specimen shows a considerable level of overlap in many pholidolial characters of *T. nigriceps* (Tab. 1), except of the numbers

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of sublabials (SbL) and ventrals (V) [9, 10-11 and 196+2, 180+2-190+3 respectively]. Although we found some differences in the numbers of sublabials (SbL) and ventrals (V) between Telescopus nigriceps and T. fallax syriacus, Schmidt (1939) and Baran et al. (2005) have stated that the numbers of SbL and V of T. fallax syriacus are 10 / 185 and 10-12 / 186-197, respectively. In this way, when we integrated our results with those of Schmidt and Baran et al. (op. cit.) it is possible to say that there are no significant differences between the two taxa in all pholidolial characters. In this respect, the color and pattern features which we mentioned above are the only one criterion which clearly separates T. nigriceps from T. f. syriacus. As we detected a head color polymorphism from the *T. nigriceps* specimens of the SE Anatolia, the original description given by Ahl (1924) who took the black head and neck as a diagnostic feature is not sufficient to designate the species.

Discussion

Disi et al. (2001) have reported that a closely related form occurs in Jordan, listed for years as *T. fallax syriacus* (Disi 1985). They were discussed the occurrence of a black headed form they call *T. nigriceps* and an almost identical form without the black head they call *T. cf. nigriceps*. Disi et al. (2001) also consider that latter as not being *T. fallax syriacus*, but they believe that the two forms, black headed and non-black headed samples do not

belong to the same taxon. According to us it is not taxonomically correct to accept the two forms (black headed and non-black headed specimens) as different taxa since we collect them in same place amongst the same stone mass and they have similar pholidolial and color-pattern features. These differences are likely to be individual variation.

Ahl (1924), Schmidt (1939) and Disi et al. (2001) also recorded the number of supralabials as 9/9, whereas this number is 8/8 in our specimens and also Syrian specimens collected by Martens (1993) (Martens, Forschungsintitut and Naturmuseum Senckenberg, Frankfurt, pers. comm. 2007). In pholidosis and coloration, Anatolian specimens almost agree with the description of Telescopus nigriceps given by Disi et al. (2001), except for the lower supralabial (8 instead of 9), relatively higher subcaudal scale counts (52-65 instead of 39-58) and also the ground coloration of the body (pinkish gray instead of pale brown or pale gray). Similar tendencies in some gekkonid species from the same region (SE Anatolia), compared with Syrian and Iraqi specimens, were reported by Tok et al. (1997) and Göcmen et al. (2002). Such geographic differences within a species may be correlated with local conditions. Taking into account also the descriptions by Ahl (1924), Schmidt (1939) and Martens (1993), that dark head and regular black cross bands characterized the species, we are the opinion that our specimens indeed belongs to the species Telescopus nigriceps.

Table no.2/A Comparison of metric and meristic characters of Telescopus nigriceps with Telescopu fallax fallax known from the Mediterranean Anatolia. P: significance of t-test or Mann Whitney U test,
 *There are no regular blotches on the tail. Values that are significantly different from those for Telescopus nigriceps (P≤0.05) are boldfaced.

	T. nigriceps (n=4)				T. f. fallax (n=8)			
Characters	Mean	Range	SD	Mean	Range	P	SD	
SpL	8	8	0.000	8	8	1.00	0.000	
SbL	10.25	10.0-11.0	0.50	10.5	10-11	0.428	0.53	
PrO	1	1	0.000	1.25	1.0-2.0	0.294	0.46	
PsO	1.75	1-2	0.5	2	2	0.182	0.000	
F	1	1	0.000	1	1	1.00	0.000	
T	2	2	0.000	2.71	2.0-3.0	0.029	0.49	
DPH	18.5	18-19	0.58	19.63	16-21	0.80	1.69	
DMB	19	19	0.000	19	19	1.00	0.000	
DA	15	15	0.000	14.88	14-15	0.480	0.35	
\mathbf{V}	187.25	182-193	4.57	217.13	208-225	0.006	6.27	
A	2	2	0.000	2	2	1.00	0.000	
SC	57.25	52-65	5.5	67.86	60-72	0.021	4.60	
B-BCB	26.75	25-28	1.5	47.5	43-51	0.006	3.02	
T-BCB	11.5	10-15	2.38	16.2	14-22	0.063	3.35	
SVL	375.5	305-510	91.59	430.63	266-507	0.295	76.76	
TL	70.25	61-83	9.43	82.5	45-105	0.248	18.48	
PL	11.23	9.49-15.24	2.68	10.78	8.05-12.18	0.759	1.59	
PW	5.41	4.32-7.45	1.41	5.06	4.02-5.52	0.631	0.60	
RoD	1.46	0.99-2.41	0.64	1.34	0.99-1.61	0.742	0.30	
RoW	2.49	2.00-3.40	0.62	2.54	2.12-2.90	0.881	0.32	
FL	4.22	3.60-5.16	0.66	3.8	2.58-4.75	0.423	0.78	
FW	3.56	2.91-4.93	0.94	3.17	2.55-3.58	0.422	0.39	
PaL	5.05	4.31-6.79	1.16	4.55	3.57-5.52	0.495	0.94	
PaW	3.42	2.94-4.47	0.71	3.26	2.31-3.71	0.714	0.55	
HOD	2.43	2.13-3.00	0.39	2.28	1.82-2.61	0.488	0.26	
TL/SVLx100	20.23	19.53-21.07	0.65	18.99	16.92-20.71	0.071	1.12	
PW/PLx100	48.09	42.44-51.70	3.96	47.19	45.32-49.94	0.669	2.01	
RoD/RoWx100	56.89	49.5-70.88	9.59	38.32	29.03-48.94	0.30	8.92	
FW/FLx100	83.62	72.62-95.94	9.71	84.7	75.37-98.84	0.865	8.76	
PaW/PaLx100	67.97	65.19-72.39	3.27	72.61	63.99-92.16	0.467	11.54	

Table no.2/B Comparison of metric and meristic characters of Telescopus nigriceps with Telescopus fallax cyprianus known from the Cyprus Island. The corresponding data of a single specimen of T. f. syriacus was also given. P: significance of t-test or Mann Whitney U test,

*There are no regular blotches on the tail. Values that are significantly different from those

for *Telescopus nigriceps* (*P*≤0.05) are boldfaced.

		T. f. cyprianu	s (n=12)	T. f. syriacus (n=1)	
Characters	Mean	Range	P	SD	
SpL	8	7-9	1.00	0.43	8
SbL	10.91	10-11	0.014	0.30	9
PrO	1	1	1.00	0.000	1
PsO	2	2	0.083	0.000	2
F	1	1	1.00	0.000	1
T	2.92	2.0-3.0	0.001	0.29	2
DPH	21.08	20-23	0.001	0.67	19
DMB	21	21	0.000	0.000	19
DA	15.92	14-17	0.005	0.67	15
\mathbf{v}	203.5	198-209	0.004	3.15	196+2
A	2	2	1.00	0.000	2
SC	64.41	54.0-72.0	0.049	4.73	55
B-BCB	46.17	37-55	0.003	4.04	27
T-BCB	*	*	*	*	13
SVL	331.08	173-499	0.474	107.89	561
TL	66.38	36.5-106	0.735	21.38	100
PL	10.26	7.59-13.75	0.441	1.94	13.94
PW	4.65	3.22-6.31	0.221	0.90	6.25
RoD	1.28	0.92-1.56	0.417	0.24	1.45
RoW	2.04	1.40-2.72	0.145	0.46	2.72
FL	3.66	2.91-4.63	0.121	0.57	4.74
FW	2.93	2.08-3.90	0.132	0.58	4.31
PaL	4.64	3.30-6.36	0.490	0.98	6.31
PaW	3	2.32-3.59	0.175	0.43	3.99
HOD	2.2	1.64-2.65	0.246	0.31	2.92
TL/SVLx100	20.11	18.32-22.22	0.844	1.13	17.3
PW/PLx100	45.31	41.32-49.79	0.127	2.63	44.83
RoD/RoWx100	63.41	56.99-72.14	0.85	4.71	53.3
FW/FLx100	79.9	70.33-87.43	0.377	6.14	90.92
PaW/PaLx100	65.72	54.56-75.51	0.471	5.69	63.23

Ahl's (1924) holotype specimen was collected by v. Oppenheim in central Mesopotamia. Therefore, there is doubtful that this specimen was collected from Syria since archaeologist v. Oppenheim traveled extensively in NE Syria (Martens, 1993). This assumption is highly possible since the number of the cross bands (24) is very similar (25-28) to our specimens from SE Anatolia than those of from South Syria (16-17), Jordan (mostly 19-22) and Iraq (18) reported by different authors (Schmidt 1939, Disi et al. 1988, 2001, Martens 1993).

Disi (1985) has mentioned that variation in the number and size of dorsal blotches or cross bands of Spalerosophis diadema are an adaptation to the existing biotopes in Jordan. However this case is not valid for our specimens collected from two different biotopes in Kilis and Sanliurfa (Fig. 1) since the numbers and size of the dorsal cross bands are similar (Fig. 2, Tab. 1). Zinner (1977) stated that snakes with a higher number of dorsal spots or cross bands have higher survival rate in desert biotopes. When we take into consideration numbers of cross bands of *T. nigriceps* from the semi-arid or semi-desert biotopes in SE Anatolia (25-28) and the desert biotopes in Syria, Jordan and Iraq (mostly 16-22) (Martens 1993, Disi et al. 2001), this tendency is obviously opposite. Therefore, our study does not confirm such trends in the number and size of dorsal cross bands along the Anatolia-Jordan direction and also east-west direction in SE Anatolia.

All specimens of Telescopus nigriceps collected from SE Anatolia are sexually mature individuals and their SVL and TL range between 305-510 mm and 61-83 mm, respectively. Similar measurements were recorded by Ahl (1924) [358 mm, 62 mm] and Schmidt (1939) for an Iraqi specimen [315 mm, 65 mm]. Disi et al. (2001) have reported that it is a medium-sized snake, reaching maximum total length of 60 cm based on Jordan specimens. Apparently our male specimen from Bagita Mountain, Kilis povince is one of the biggest recorded individuals of the species with a total length of 593 mm and 83 mm tail length. There are no information on this subject for the other known totally three specimens from Syria (Martens 1993) and Jordan (Haas 1943). In the light of these data, T. nigriceps seems to be relatively smaller than T. fallax syriacus which its measurements was reported as 343-880 mm SVL and 67-172 mm TL (n=3) by Baran et al. (2005). Our specimen from Sanliurfa of T. fallax syriacus is a medium-sized specimen the subspecies with the values of 561 mm SVL and 100 mm TL as reported here by

Leviton et al. (1992) stated that the *Telescopus fallax* group including *T.nigriceps* is one of the least studied and understood colubrid species complexes, and is in serious need of revision. However they listed *T. nigriceps* as a subspecies of *T. fallax* though earlier authors had recognized it as a

full species (Ahl 1924,; Schmidt 1939, Haas 1943, Disi 1985, Disi et al. 1988, Martens 1993). The sympatric occurrence of two distinctly different Telescopus forms (T. nigriceps and T. fallax syriacus) in SE Anatolia indicates valid specific status for Telescopus nigriceps. Although the variations in head color pattern which we detected in SE Anatolian specimens and also in overlapping pholidotical characters with *T. fallax syriacus* are striking, there is no reason to accept *T. nigriceps* as a morph of T. f. syriacus since any transitional form in color pattern has not found yet. However we have little hesitation in regarding the species as fully distinct since it agrees most closely in pholidotical characters with sympatric *T. f. syriacus*. *T. nigriceps* also can be distinguished easily by much lower ventral counts, smaller size, different color and pattern and much lower counts and broader cross bands from other closely related taxon, T. hoogstrali (Schmidt & Marx 1956), which seems to be endemic to a small geographic area encompassed Sinai and the Negev (Zinner 1977, Baha El Din 2006). As the numbers of dorsal cross bands on the body of *T. nigriceps* (15-29) (Disi 1985, Disi et al. 2001) are similar to the number of irregular dorsal blotches of T. f. syriacus (18-32) reported by Zinner (1977), we believe that *T. nigriceps* is much more closely related to T. f. syriacus than to T. hoogstrali, which show higher numbers (around 40 on the dorsum between neck and vent) but regular cross bands as in T. nigriceps (Zinner 1977, Baha El Din 2006). We cannot draw any

zoogeographical and evolutionary comments regarding the *T. nigriceps* until a comprehensive revision including all known *Telescopus* spp. and subspp. would be conducted in future. According to us, such comments should be supported by additional serological and molecular data based on mitochondrial DNA sequence analysis.

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