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A NEW LOCALITY RECORD OF *Pelias barani* (BÖHME ET JOGER, 1983) FROM THE NORTHEASTERN ANATOLIA

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Two female individuals of Baran's Adder species *Pelias barani* were recorded in Tektaş village of Pazar, Rize (Turkey). These individuals were compared with other samples in the literature, and introduced their size and scalation, color patterns, habitat structures, threats and conservation situations in this paper.

Keywords: biodiversity; endemic; *Pelias barani*; Rize; Viperidae.

New locality records are essential in the management and conservation of biodiversity to have information about the natural history, habitat preferences and geographic distribution of many animals (González-Maya et al., 2014). In Turkey, since the biology and ecology of most snake species is still poorly known, new locality records provide opportunities for us to get much more information on them (Gül, 2015). Baran's Adder, *Pelias barani*, was first described by Böhme and Joger (1983) from the northwestern Anatolia. In later years, many studies revealed new locality records across the northern Anatolia (Baran et al., 1997; Franzen and Heckes, 2000; Baran et al., 2001; Avcı et al., 2004; Baran et al., 2005; Kumlutaş et al., 2012; Gül, 2015; Mebert et al., 2015; Göçmen et al., 2015). *P. barani* is one of the Anatolian vipers, and is a little known and rarely encountered viper (Kumlutaş et al., 2012).

Material. Two female specimens were found dead by Serkan Gül from Tektaş village of Pazar, Rize at 537 m a.s.l. on November 11, 2015. Sex of specimens was determined by the shape of tail (Fig. 1). Up to now, records of known *P. barani* were collected from literature, and indicated all of them on a map with new locality record (Fig. 2). Snout-vent length and tail length were taken to the nearest millimeter using a ruler; the ventral plates were counted according to Dowling (1951), the terminology used conforms to Franzen and Heckes, 2000; Avcı et al., 2004; Baran et al., 2005; Kumlutaş et al., 2012 and Gül, 2015.

Size and scalation. Total length of specimens are 565 (Fig. 1A, B) and 570 mm (Fig. 1C, D), respectively. The scales on longitudinal rows of dorsal at mid-body are 142 and 143. Both specimens had two apicals in contact with rostral and also they had two canthals on each side of the head. Since the parts of head in specimens were damaged, some scales could not clearly be counted (see Table 1 in detail).

Color pattern. The dorsal color pattern of the specimens are almost gray in hue, and have dark brown zigzag



Fig. 1. Overview on the part of dorsal and ventral of *Pelias barani* found in Pazar, Rize, northeastern Anatolia, Turkey.

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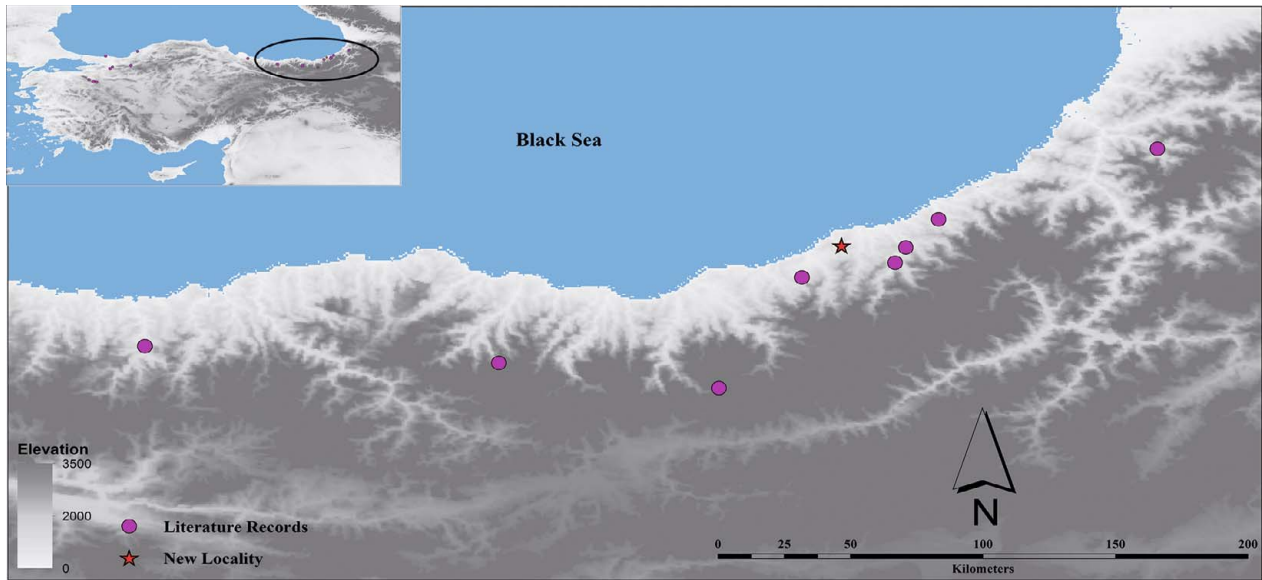


Fig. 2. The map shows distribution of *Pelias barani* in Turkey, including literature records and new locality. Purple circle presents literature records whereas red star indicates new locality.

structure across dorsal. The ventral color includes many different shades of brown, sometimes darkish or whitish brown and also ground color of the ventral side is lighter than dorsal side. This color variation continues across both upper labials and lower labials on each side of head (Fig. 1). In its morphology and color-pattern, the new specimens correspond well with the other known individ-

uals as described by Böhme and Joger, 1983; Baran et al., 1997; Franzen and Heckes, 2000; Baran et al., 2001; Avcı et al., 2004; Baran et al., 2005; Kumlutaş et al., 2012; Gül, 2015; Mebert et al., 2015; Göçmen et al., 2015.

Habitat. The new locality where the specimens were found indicated a rich diversity of trees and bushes (Fig. 3), the predominant species can be listed as Chest-

TABLE 1. Morphometric Measurements and Counts of Known Specimens Based on Published Information Together with New Locality

Character	References and localities									
	1	2	Franzen and Heckes (2000)			Baran et al. (2001)		3	4	
	60 km N of Adapazarı	Camlıhemşin Ardeşen	Dereli Giresun		Fırtına Valley, Ardeşen	Arpagözü Çaykara Trabzon		The north-west of Artvin	İkizce Ordu	Geyve Adapazarı
	♀	♀	♀	♂	♀	♀	♀	♂	♂	♀
SVL, mm	472	426	605	545	595	514	395	No	415	503
Tail length, mm	68	50	68	73	65	69	51	No	57	62
Ventrals	145	145	146	142	145	142	142	145	147	145
Subcaudals	37/37	31/31	31/30	36/36	31/30	28/29	25/28	35/36	34/35	33/33
Loreal scales	5/5	5/5	4/4	5/4	11/9	5/5	4/5	4/5	4/5	5/5
Circumoculars	11/12	12/12	9/9	11/10	11/10	9/8	9/9	11/12	12/13	11/13
Apicals	2	—	—	—	—	1 (2)	2	2	2	2
Upper labials	10/10	9/9	9/10	9/8	9/9	9/7	9/8	8/9	9/9	9/9
Lower labials	12/12	11/11	11/11	12/12	12/13	9/9	10/11	10/10	12/12	11/11
Gulars	no	4/4	4/4	4/4	4/4	5/4	5/6	—	4/4	no
Canthals	3/3	2/2	2/2	2/2	2/2	2/2	2/2	—	no	2/2
SSO	5	—	—	—	—	4	5	—	4	—
EUL	1/1	—	—	—	—	1/1	1/1	—	1/1	—
DS	21	21	21	21	23	21	21	23	22	—

nut (*Castanea sativa*), Oriental Alder (*Alnus orientalis*), European Hornbeam (*Carpinus betulus*), Alpenrose (*Rhododendron ponticum*), including ferns such as *Pteridium aquilinum*. Additionally, reptile and amphibian species such as *Bufo verrucosissimus* (Pallas, 1814), *Anguis fragilis* (Linnaeus, 1758), *Darevskia rudis* (Bedriaga, 1886) probably occupy the same geographic area with *P. barani*.

Threats. *P. barani* is listed as Near Threatened in the IUCN Red list. Population trend of *P. barani* has been decreased because of habitat destruction, road deaths and deaths caused by local human activities (Gül, 2015). Furthermore, climate change can be a threat since climatic conditions such as local precipitation patterns restrict distribution of *P. barani* (Gül, 2015).

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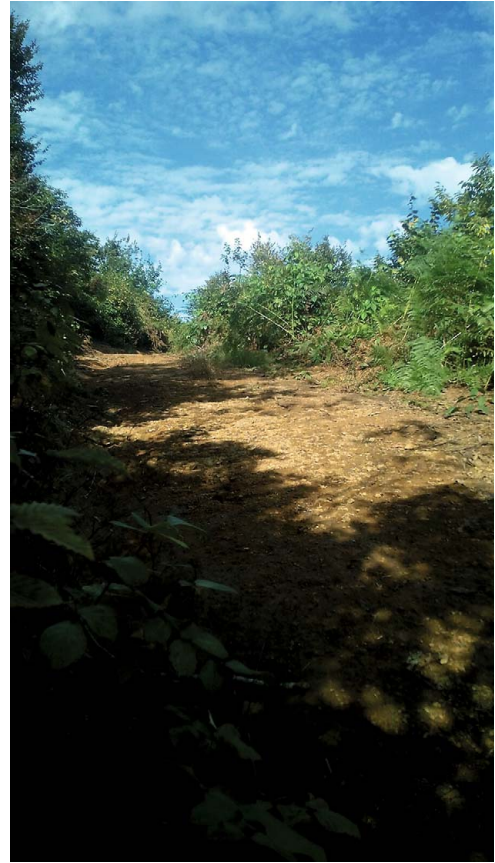


Fig. 3. The habitat of *Pelias barani* from Pazar, Rize.

TABLE 1 (continued)

Character	References and localities								
	Göçmen et al. (2015)						This study		
	5 Kozlu Zonguldak	6 Büyükdere Çayeli Rize	Bözüyük Bilecik	İnehöl Bursa	Domaniç Kütahya	Ömerler Bolu Merkez		♀	♀
♂	♀	♀	♂	♂	♂	♂	♀	♀	
SVL, mm	460	600	269	455	451	434	556	500	508
Tail length, mm	60	70	42	84	85	81	99	65	62
Ventrals	145	142	147	144	142	144	145	142	143
Subcaudals	33/34	29/30	33/33+1	42/42+1	43/43+1	43/43+1	43/43+1	30/28	30/30
Loreal scales	4/4	5/5	4/4	4/5	4/4	4/4	5/5	4/4	4/4
Circumoculars	11/13	11/12	10/10	9/10	10/10	11/11	12/13	Broken/broken	Broken/12
Apicals	2	2	2	2	2	2	2	2	2
Upper labials	9/9	9/9	9/9	9/10	9/9	10/11	11/11	Broken/broken	9/11
Lower labials	12/12	11/12	11/11	10/10	12/12	9/10	9/9	Broken/broken	Broken/broken
Gulars	4/4	4/4	—	—	—	—	—	Broken/broken	4/4
Canthals	2/2	2/2	—	—	—	—	—	2/2	2/2
SSO	5	5	—	—	—	—	—	5	5
EUL	1/1	1/1	1/1	1/1	1/1	1/1	1/1	Broken	2/2
DS	23	21	21	21	21	21	22	23	22

SSO, scales between supraoculars; EUL, scale rows between eyes and upper labials; DS, longitudinal rows of dorsal scales. References: 1, Böhme and Joger (1983); 2, Baran et al. (1997); 3, Avci et al. (2004); 4, Baran et al. (2005); 5, Kumlutaş et al. (2012); 6, Gül (2015).

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