

Variation in *Pelobates syriacus* of Turkey

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Abstract.- Morphometric data and color patterns of *Pelobates syriacus* from different regions of Turkey were compared. *Pelobates syriacus* from Edirne appear to be distinct in terms of color pattern. *Pelobates syriacus* from Seydişehir appear to be distinct in terms of morphometric measurements.

Key words.- *Pelobates syriacus*, Turkey, morphometry, color pattern

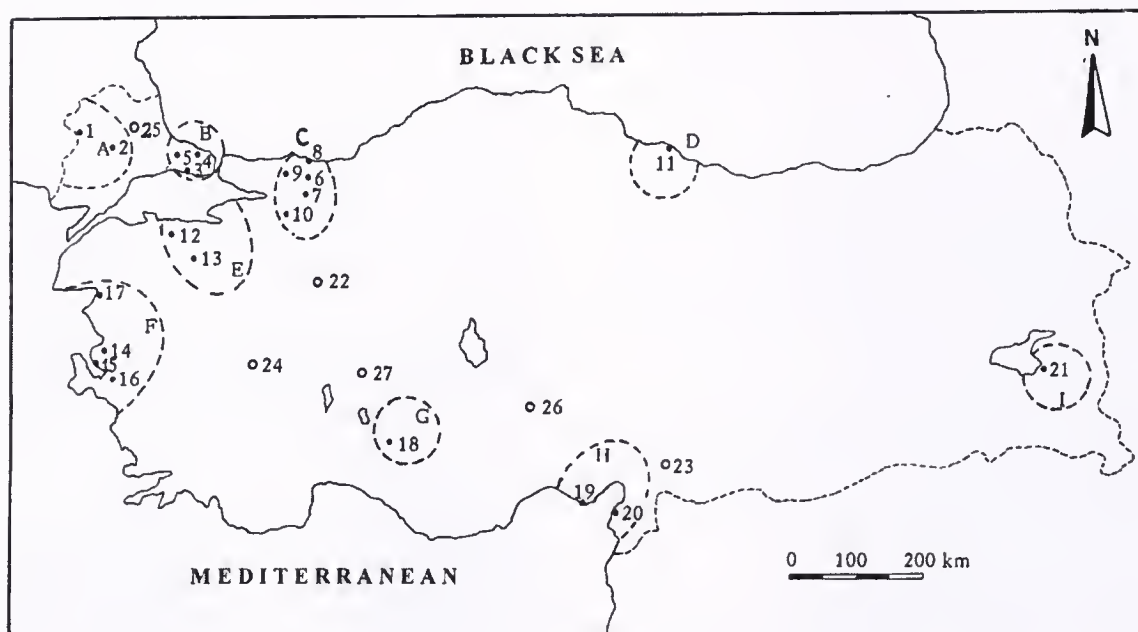


Figure 1. The places where *Pelobates syriacus* have been collected in Turkey. The key to the letters is found in Table 2. Dark circles = The localities where we collected specimens. Open circles = The localities where specimens were collected before. 1. Büyükdöllük, 2. Babaeski, 3. Altınşehir, 4. Terkos, 5. Yassiören, 6. Adapazari, 7. Söğütlü, 8. Karasu, 9. Poyrazlı Lake, 10. Çerkeşli, 11. Terme, 12. Karacabey, 13. Bursa, 14. Şakran, 15. Bostanlı, 16. Bornova, 17. İvrindi, 18. Seydişehir, 19. Karataş, 20. İskenderun, 21. Van.

Pelobates syriacus Boettger 1889 was first described from specimens collected from Hayfa-Israel. Later, Mertens (1923) examined two specimens, found in Belesuwar near the Azerbaijan and Iran border. Because of their long and narrow skull and the round and raised frontoparietals, he recognised them as another subspecies, *Pelobates syriacus boettgeri*.

Other specimens from Macedonia were described by Karaman (1928) as the subspecies *Pelobates syriacus balcanicus*. Müller (1932) criticized this classification based on the shape of the skull. He emphasised that skull shape can be variable. Another subspecies

living around Tiflis, Georgia was named *Pelobates syriacus transcausicus* by Delwig (1927). According to Gilson (1937), this subspecies is intermediate in morphology between *P. s. boettgeri* and *P. s. syriacus*, and Terentjev and Chernov (1965) are convinced that *P. s. transcausicus* is a synonym of the nominate race. Furthermore, Eiselt and Schmidtler (1973) proposed *P. s. boettgeri* as a synonym for *P. s. syriacus*.

The taxonomic status of Turkish *Pelobates syriacus* is poorly studied. Mertens (1953) described a young sample collected in Van (Turkey) and suggested that it was *P. s. boettgeri*. Zaloğlu (1964) stud-

Table 1. Percentage of each color pattern in populations of *Pelobates syriacus*.

Population	A	B	C	D
Edirne	-	-	100	-
Istanbul	56.66	40.00	3.34	-
Adapazari	11.54	11.54	11.54	65.38
Samsun	68.42	21.05	-	10.53
Bursa	73.92	21.73	-	4.35
Balikesir-İzmir	15.00	75.00	5.00	5.00
Seydişehir	7.70	-	-	92.30
Adana-Iskenderun	66.00	-	-	34.00
Van	14.38	14.28	-	71.44

ied *Pelobates syriacus* from the Turkish region of Izmir. He made an osteological comparison of characters used to differentiate the subspecies of *P. syriacus*. He pointed out that these characters showed a wide range of variation, and refrained from classifying the Izmir *P. syriacus* into subspecies.

In this study, samples (77 male, 57 female, 25 juveniles, 35 larvae) collected from 9 different areas (Istanbul, Adapazari, Samsun, Bursa, İzmir-Balikesir, Seydişehir, Adana, Van) were investigated to obtain more information about variation in *Pelobates syriacus* living in Turkey (Fig. 1).

Results and Discussion

There are four kinds of dorsal patterns on *Pelobates syriacus* (Fig. 2). The dorsal patterns are not sexually dimorphic. The percentage of dorsal patterns are follows: A: 36.08 %, B: 25.95 %, C: 13.92 %, D: 24.05 %. When all the samples are compared, it is seen that the dorsal pattern of Edirne population is different than the other populations (Table 1).

All of the adults from Edirne have big green dots narrow raised surrounding on the back. The background color of the back is light yellow-green. On this background there are connected raised surrounding with brown-green dots. Those dots also appear on all extremities. Furthermore, on the background color, and within the brown-green dots, are yellow and red dots. These dots are missing on the upper side of the front fingers. Dots on the body become smaller on the side. All the Edirne population have C pattern type (Fig. 2).

In terms of morphological measurements, *Pelobates syriacus* populations living in Turkey are very similar. Here, the exception is the Seydişehir population which have shorter indices of tibia length (Table 2).

The differences in the color patterns of adult animals from the Edirne population and the morphomet-

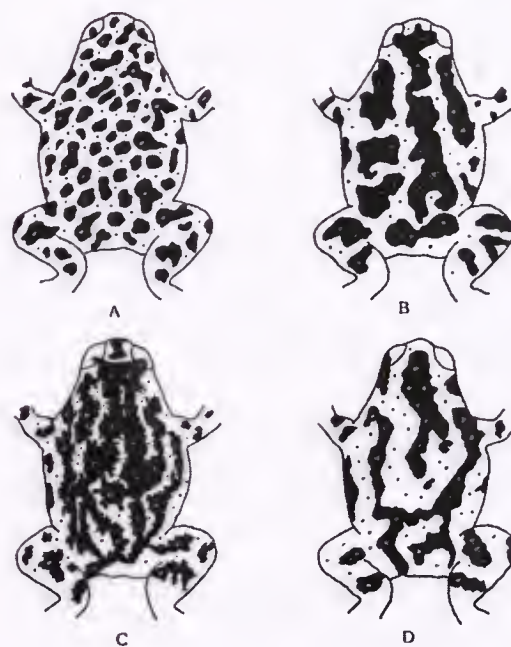


Figure 2. Types of color patterns in *Pelobates syriacus*. A: Spots are irregularly distributed and isolated. B: Two or more spots combine to form irregular islets. C: The edges of the spots are wavy and connected by thin bands. D: Spots form lengthwise bands.

ric differences of the Seydişehir population should be explored using biochemical data in order to determine whether the *Pelobates syriacus* from these regions represent different taxa.

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