## Translation: Testudo graeca anamurensis ssp. nov. from Asia Minor

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Weissinger, H. 1987. Testudo graeca anamurensis ssp. nov. aus Kleinasien. ÖGH-Nachrichten (Wien) 10/11: 14-18

The South-western coast of Turkey, from the Bey mountains near Antalya eastwards up to Mersin is the area of distribution of a *Testudo graeca* which is characterized by an elongated, trapezium-shaped and strongly flattened carapace. This southcoast-population was so conspicuous among the more than 200 specimens which I examined and measured in Turkey, that I consider them a geographic subspecies and describe them as follows:

## *Testudo graeca anamurensis* nov. ssp.

#### Material

Type: One female, Anamurum; NMW 30795:1 Paratypes: One male, Anamurum; NMW 30795:2df

One female, Side; NMW 30795:3

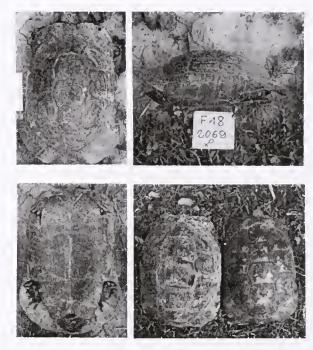
Both alive in the author's collection

#### Terra typica

Beach of Anamurum, 7 km. west of Anamur, SW coast of Turkey.

### **Diagnosis**

Differs from Testudo graeca ibera Pallas 1814 by its considerably flatter and narrower (elongated trapezium-shaped) carapace. The length of the carapace is two-and-a-half times its height and one-and-a-half times its width. In most cases the carapace pattern is a completely broken, obvious blotchy pattern. The plastron has a sharply demarcated pattern of brown to black blotches, which can cover the plastral area for 20 - 100 %. In 80 % of cases, 100% at the terra typica, the animals have a white-yellow chin and throat. The head can be uniformly dark to irregularly spotted with yellow. A triangle on the snout - as in Testudo graeca terrestris Forskal 1775 - may be present only in early juvenile stages. In the subspecies most abundant in Asia Minor, Testudo graeca ibera Pallas 1814, the carapace is oval, domed regularly and has a smooth posterior margin. Its ground colour is bright olive with large yet individual blotches. The head and extremities are most often uniformly dark. The plastron usually shows indistinctly bordered blotches.



Figures 1-3. (Top and bottom left) *Testudo graeca anamurensis* ssp. nov.; paratype. female NMW 30795:3.

Figure 4. (Bottom right) *Testudo gracea*. Ssp. *anamurensis*, male. Anamurum (left); ssp. *ibera*, female, Köyegegiz (right).

Table 1. Measurements (straight-line distance) of the type specimen and a paratype

NMW 30795:1	NMW 30795:3
260 mm	210 mm
160 mm	135 mm
105 mm	88 mm
	260 mm

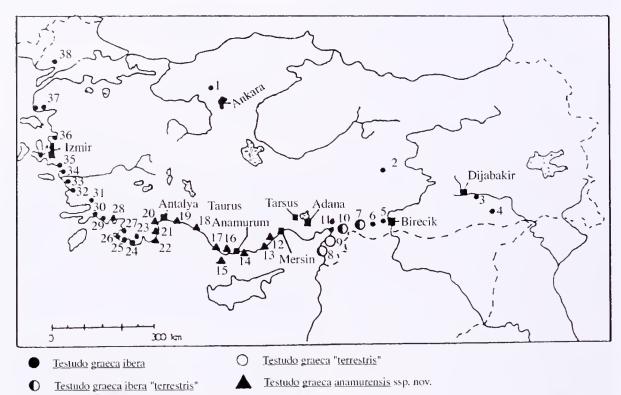


Figure 5. Localities of *Testudo graeca* in Turkey with dates that tortoises were observed (Weissinger, 1986). 1, ca. 70 km NW of Ankara, 5/18; 2, Dogansehir, open oak forest, 5/20; 3, 4 km from Diyabakir, 5/22; 4, 40 km from Mardin; 5, Birecik, 5/24; 6, Nizip, in the direction of Ganziantep, dry wadi, about 45° steep loam walls with tortoise burrows, 5/24; 7, ca. 10 km N of Islaniye, 5/24; 8, 20 km S of Iskenderund, 5/25; 9, ca. 20 km N. of Iskenderund, 5/26; 10, ca. 25 km of Fg, cornfield, 5/26; 11, 1 km from road crossing Ceyhan - Gaziantep, lava field, 5/26; 12, Ayas, 5/27; 13, Korykos-Kizkale, in the direction of Silifke, 5/27; 14, Bozyazi, onion field, 5/28; 15, Anamurum, 7 km W of Anamur, 5/29; 16, ca. 20 km W of Anamur, 5/29; 17Pine forest, ca. 40 km W of Anamur, towards Gazipasa, 5/29; 18, Side, sand dunes, ruin-meadows, 5/30; 19, 20 km from Antalya, 5/31; 20, 10 km from Antalya, towards Kugla, 5/31; 21, Kemer, 5/31; 22, 10 km from Kemer, 5/31; 23, Mountain pass, ca. 800 m above sea level, towards Kas, 5/31; 24, Vavi, ca. 800 m above sea level, towards Kas, 5/31; 25, Kinis, wheat field, 6/1; 26, Letoon, tilled field, 6/1; 27, Esen, pine forest, 6/1; 28, Kargi, 6/1; 29, Köygegiz, riverine forest with wet meadows 6/2; 30, Ula, 6/2; 31, Gökovalskele, 6/2; 32, Yatagan, 6/2; 33, Söke, towards Kusadasi, 6/2; 34, Selcuk, 6/3; 35, Pamucak, 6/4; 36, 2 km from Ayvacik, 6/6; 37, 15 km from Ayvacik, 6/6; 38, 20 km from Kesan, towards Greece (European Turkey).

### Etymology

I name this South-west coast race after its terra typica, Anamurum, *Testudo graeca anamurensis*.

#### Distribution

The area of distribution of this race extends along the Southwest coast of Turkey from the Bey Daglari in the West to the plain of Mersin in the East. Most were found in the area between Side and Anamurum.

## **Acknowledgments**

This translation was provided by Peter Paul van Dijk with some additions by Heinz Grillitsch. The translation was done with the permission and full agreement of the Austrian Herpetological Society. Figures 1-4 were provided by Jim Buskirk who, in turn, recieved

Weissinger's original slides from his widow. The editors of AHR would like to thank Heinz Grillitsch for his assistance in publishing this translation.

### **Literature Cited**

Bodenheimer, F. S. 1935. Animal life in Palestine. An introduction to the problems of animal ecology and zoogeography. Ludwig Mayer, Jerusalem. 506 pp.

Eiselt, T, J., and Spitzenberger, F. 1967. Ergebnisse Zoologischer Sammelreisen in der Türkei: Testudines. (Results of zoological collecting expeditions in Turkey: Testudines) – Annalen des Naturhistorischen Museums in Wien. Serie B. fur Botanik und Zoologie 70: 357-378.



Figure 6. The type specimen of *Testudo graeca anamurensis* Weissinger 1987, NMW 30795:1.

Obst, F.-J., and Meusel, W. 1974. *Die Landschild-kröten Europas* (The tortoises of Europe) A. Ziemsen Verlag, Wittenberg Lutherstadt

Wermuth, H. 1958. Status und Nomenklatur der Maurischen Landschildkröte, *Testudo graeca*, in SW-Asien und NO-Afrika. (Status & Nomenclature of *T. graeca* in SW Asia & NE Africa). Senekenbergiana Biologica, 39: 149-153.

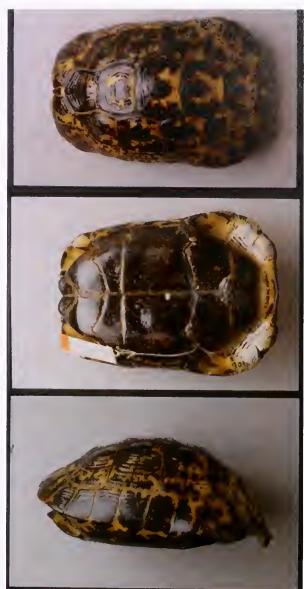


Figure 7. A male paratype of *Testudo graeca anamu-* rensis Weissinger 1987, NMW 30795:2.

Wermuth, H., and Mertens, R. 1961. Schildkröten - Krokodile - Brückenechsen. (Turtles, Crocodiles & Tuatara). Fischer Verlag, Jena 422 pp.

Werner, F. 1902. Die Reptilien- und Amphibienfauna von Kleinasien. (The reptile and amphibian fauna of Asia Minor). Sitzungsberichte Akademie Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse 111: 1057-1121.

# **Appendix**

This translation was prepared by Peter Paul van Dijk with some additions by Heinz Grillitsch of the Naturhistorische Museum Wien (NMW). This translation is published with the full permission of the Austrian Herpetological Society. In addition to the original figures, Heinz Grillistach and Alice Schumacher (NMW) have provided additional figures of the original type series (Figs. 6-8). Uwe Fritz (pers. comm.), states that there are three additional paratypes in the collections of the Staatliches Museum für Tierkunde Dresden (MTKD 29200-29202). Finally, the female paratype that Weisssinger lists as NMW 30795 is currently catalogued as NMW 31031 (Fritz and Grillitsch, pers. comm.).



Figure 8. A female paratype of *Testudo graeca anamurensis* Weissinger 1987, NMW 31031 (formerly 30795:3).