# THE DISTRIBUTION OF VIPERA XANTHINA (GRAY, 1849) ON THE EAST AEGEAN ISLANDS AND IN THRACE.

By: Jaap van Wingerde, Postbus 66, 3500 AB Utrecht, The Netherlands.

Contents: Introduction - Sámos - Kastellórizon -Distribution on the east Aegean Islands - Distribution in Thrace - Toxicity of the venom - References.

## INTRODUCTION

This article, on the distribution of *Vipera xanthina* on the east Aegean Islands and in Thrace, was written due to the observation of a specimen on the Greek island of Sámos and its possible occurrence on the Greek island of Kastellórizon. A few comments have also been added regarding the potency of the species' venom.

The names of Middle-Eastern vipers have been subject to many change, and it is essential when studying older literature to have access to the lists of synonymous names by Baran (1976) and Joger (1984).

Many Turkish names are not spelled as they ought to be because the Turkish alphabet is not entirely the same as ours. e.g. the i is written without a dot and there are some letters which are not included in our alphabet. Greek names are also often confusing since they have to be translated from Greek to Latin spelling.

#### SAMOS

During her vacation on the Greek island of Sámos, Mrs. Mary Boorsma found a dead snake lying next to the road near Manolátes. She was kind enough to take a few photographs of it, one of which has been printed in this article.

Judging from its pattern, the fact that it does not have a horn on its nose and from the literature which tells us of the distribution of this species, it is most logical to assume that this is an example of the species *Vipera xanthina*. This assumption has been confirmed by Dr. M.S. Hoogmoed.

There is no other information that I know of concerning the presence of *Vipera xanthina* on the island of Sámos.

#### KASTELLORIZON

In May of 1983, I observed a stout bodied snake on the Greek island of Kastellórizon. The snake, which has a black and off-white pattern, hissed loudly and made a fast retreat. The terrain was rocky and the vegetation had been kept short by goats which regularly grazed the area. I believe that the snake I saw was stouter than the one Mrs. Boorsma photographed on Sámos. I also believe that it lacked the same regularity in its colour pattern. Even so, I still believe that the specimen which I saw was an example of Vipera xanthina.

### DISTRIBUTION ON THE AEGEAN ISLANDS

Boettger (1880) reported observing venomous snakes on the Greek island of Khálki. He believed that they could only have been *Vipera xanthina*.

Bodenheimer (1944) stated that the Aegean islands were included within the range of this species. However, it is assumed that he meant that *Vipera Lebetina* (Linnaeus, 1758) could be found on a few islands of the Cyclads (Pieper, 1970).

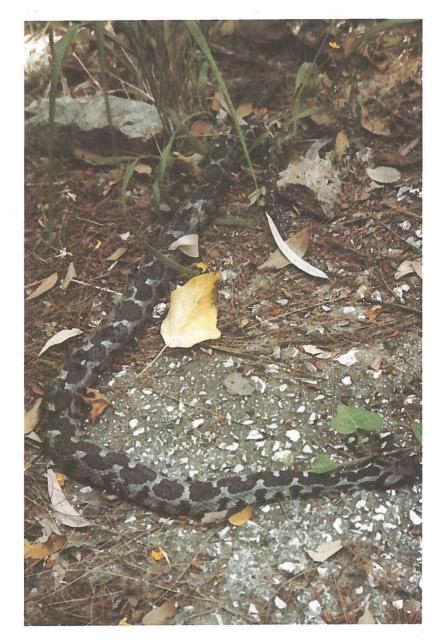


Fig. 1. Vipera xanthina. Manolátes, Samos, Greece. (21?)-V-1984. Foto: Mary Boorsma. Vipera xanthina was first officially confirmed to be found on an Aegean island by Clark (1968). He reported that this snake was to be found on the islands of Léros and Pátmos.

Ondrias (1969) reported a specimen caught in the village of Volissós, which lies on the northwestern end of the Greek island of Khios.

Pieper (1970) reported that a viper of this species had been caught on the Greek island of Pátmos.

Clark (1968), Steward (1971) and Joger (1984) all refer to an article by R.J. Clark (1968): The addition of *Vipera xanthina* to the Greek herpetofauna. Senck. biol., Vol. 49. This article was never published in the Senckenbergiana biologica and also cannot be found in the Zoological records. However, the article, on the presence of *Vipera xanthina* on the islands of Léros and Pátmos may be regarded as reliable since Clark was refering to his own unpublished work.

Clark (1972) reported catching a specimen of *Vipera xanthina* on the Greek island of Sími.

Schneider (1983) reported that a specimen had been caught in an olive grove near the village of Kantouni on the Greek island of Kálimnos.

Judging from the above accounts, it may be concluded that *Vipera xanthina* is to be found on the Greek islands of Kálimnos, Khios, Léros, Pátmos, Sámos and Sími. Some doubt still remains as to whether or not the species is to be found on the islands of Khálki and Kastellórizon.

### DISTRIBUTION IN THRACE

Thrace was the name of a kingdom in the region now occupied by European Turkey, northeastern Greece

and southeastern Bulgaria.

Werner (1914) reported a specimen caught in Spartakule near Constantinople (Istanbul) in European Turkey.

Schwarz (1936) stated that *Vipera xanthina* was to be found in a small region northwest of Constantinople in the Istranza Mountains (Yildiz or Istranca Daglari). He also mentioned the finding of a specimen in Spartakule.

Bodenheimer (1944) reported a specimen from Spartakule which was kept in the Zoological Museum in München and also mentioned the specimen reported by Werner (1914).

I was not able to find Spartakule on any maps of European Turkey. It is therefore still unclear to me as to whether or not Spartakule is located in the Istrandza Mountains. Bodenheimer described *Vipera xanthina* as an inhabitant of the Thracian peninsula near Istanbul. According to Steward's (1971) distribution map, *Vipera xanthina* is found in Europe only in a small area around Istanbul.

Baran (1976) and Basoglu & Baran (1980) do not include European Turkey in the range of *Vipera xanthina* 

Gärdenfors (1980) reported observing a specimen in an olive grove east of Mákri in northeastern Greece.

Joger (1984) considers *Vipera xanthina* to be found in European Turkey, but he did not mark any locations where the viper had been found in that region.

From the above, it is clear that not enough is known about the distribution of *Vipera xanthina* in Thrace. So far, there has only been one observation of the species on the Greek mainland and also the reports on observations of the species in European Turkey are rather old. Since the Istrandza Mountains run up into southeastern Bulgaria and if in fact this reptile does inhabit these mountains, then it may very well be possible to find this species in Bulgaria also.

### TOXICITY OF THE VENOM

Bodenheimer (1944) reported that a specimen in Turkey had killed a cow.

According to Claessen (1977), 5% of the victims bitten by Vipera xanthina die even after being hospitalized and administered antivenin. 93% may die if no antivenin is administered. Arnold et al. (1978a and 1978b) agree its bite can be fatal for both humans and animals. Considering this evidence, it seems only wise to take extra precautions when hiking or climbing in areas known to be inhabited by this species.

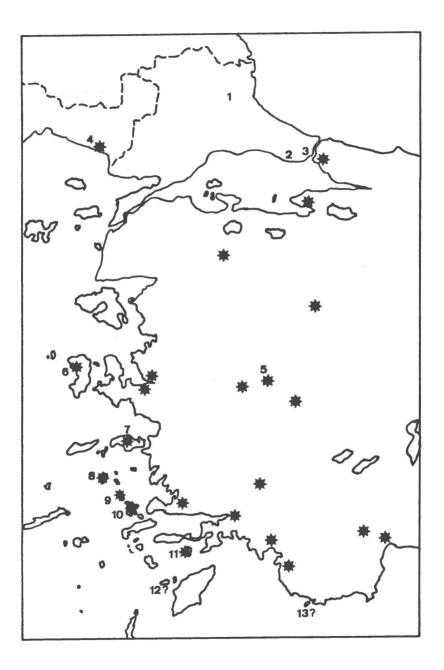
### REFERENCES

Arnold, E.N., J.A. Burton & D.W. Ovenden, 1978a. A field guide to the reptiles and amphibians

<u>Map. 1</u>. Distribution of *Vipera xanthina* in Greece and western Turkey. The locations at which the viper was found on the Turkish mainland have been added from Joger's (1984) distribution map.

- 1. Istrandza Mountains
- 2. Find-spot according
  - to Bodenheimer (1944)
- 3. Find-spot according to Steward (1971)
- 4. Mákri
- 5. Kula (Vilayet Manisa)
- 6. Khios: Volissos

- 7. Sámos: Manolátes
- 8. Pátmos: Skala
- 9. Léros
- 10. Kálimnos: Kantouni
- 11. Simi
- 12. Khálki
- 13. Kastellórizon



of Britain and Europe. Collins, London. ISBN 0 00 219318 3.

- ---, --- & ---, 1978b. Elseviers reptielen- en amfibieëngids. Elsevier, Amsterdam. ISBN 90 10 01935.7.
- Baran, I., 1976. Türkiye yilanlarinin taksonomik revizyonu ve cografi dagilişlari. TBTAK Yayinlari 309, TBAG 9. TBTAK, Ankara.
- Başoglu, M. & I. Baran, 1980. Türkiye sürügenleri II: Yilanlar – The reptiles of Turkey II: The snakes. Ege Universitesi Fen Fakültesi Kitaplar Serisi 81. Ege Universitesi Matbaasi, Bornova – Izmir.
- Bodenheimer, F.S., 1944. Introduction to the knowledge of the amphibia and reptilia of Turkey - Türkiyenin Amfibi ve Sürügenleri Bilgisine Giriş. Istanbul Üniversitesi fen fakultesi mecmuasi - Revue de la faculté des sciences de l'université d'Istanbul, Istanbul. Series B, Vol. 9 (1): 1-94, pl. 1-10.
- Boettger, O., 1888. Verzeichniss der von Hrn. E. von Oertzen aus Griechenland und aus Kleinasien mitgebrachten Batrachier und Reptilien. Sitzungsber. d. kön. preuss. Akad. d. Wissensch. zu Berlin, Berlin. 1888 (1): 139-186.
- Claessen, H., 1977. Slangebeten in Europa. Terra, Wommelgem. Vol. 13 (4): 41-44.
- Clark, R.J., 1968. A collection of snakes from Greece. Brit. J. Herpetol., Vol. 4 (3): 45-48.
- ---, 1972. New locality records for Greek reptiles. Brit. J. Herpetol., Vol. 4 (11): 311-312.
- Gärdenfors, U., 1980. Ein Nachweis von Vipera xanthina in Griechenland (Reptilia: Serpentes: Viperidae). Salamandra, Frankfurt am Main,

138

Vol. 16 (4): 270. ISSN 0036-3375.

- Joger, U., 1984. The venomous snakes of the Near and Middle East. Beihefte zum Tübinger Atlas des vorderen Orients. Ludwig Reichert, Wiesbaden. ISBN 3-88226-199-4.
- Ondrias, J.C., 1969. The occurrence of *Vipera xanthina* in the island of Chios, Greece. Biologia Gallo-Hellenica, Toulouse. Vol. 2: 185-187.
- Pieper, H., 1970. Neue Beiträge zur Kenntnis der Herpetofauna der südägäischen Inseln. Senck. biol., Frankfurt am Main. Vol. 51 (1/2): 55-65.
- Schneider, B., 1983. Zur Herpetofauna der Inseln Kalymnos und Telentos (Dodekanes, Ägäis). Salamandra, Bonn. Vol. 19 (1/2): 61-70. ISSN 0036-3375.
- Schwarz, E., 1936. Untersuchungen über Systematik und Verbreitung der europäischen und mediteranen Ottern. Behringwerk Mitt., Marburg-Lahn. Vol. 7: 159-355, 361-362, Karte.

Steward, J.W., 1971. The snakes of Europe. David & Charles, Newton Abbot. ISBN 0 7153 5199 0.

Werner, F., 1914. Zur Herpetologie der Türkei. Zool. Anzeiger, Vol. 43: 497-499.