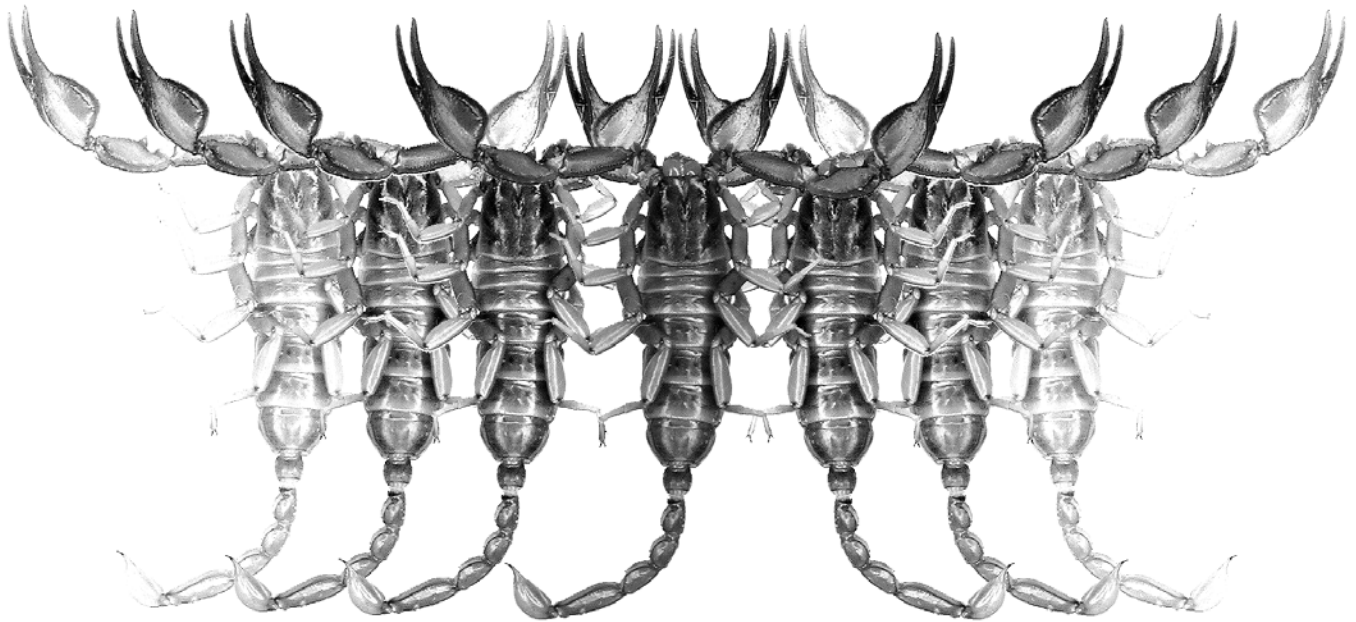


Euscorpius

Occasional Publications in Scorpiology



**On the Type Locality of *Mesobuthus vesiculatus*
(Pocock, 1899) (Scorpiones: Buthidae)**

Ayşegül Karataş, Victor Fet & Muhammed M. Gharkheloo

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- **ZISP**, Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia
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- **NTNU**, Norwegian University of Science and Technology, Trondheim, Norway
- **OUMNH**, Oxford University Museum of Natural History, Oxford, UK
- **NEV**, Library Netherlands Entomological Society, Amsterdam, Netherlands

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On the type locality of *Mesobuthus vesiculatus* (Pocock, 1899) (Scorpiones: Buthidae)

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Summary

The type locality for *Mesobuthus vesiculatus* (Pocock, 1899) (Scorpiones: Buthidae) is identified as Astarqān, East Azerbaijan Province, Iran, at 38°32'03"N, 46°12' 36"E.

The scorpion *Mesobuthus vesiculatus* (Fam: Buthidae) was described by Pocock (1899: 405–406, pl. XXVI, fig. 4) as *Buthus vesiculatus* in a paper, which dealt with the material collected near the Lake Urumiyeh (Urmia, Urmi), northwestern Iran. Within this paper, *Buthus vesiculatus* was described in a separate note, and its type locality was indicated only as “Astracan, in Persia.” Three syntypes were deposited in the Natural History Museum (BMNH), London, United Kingdom.

The identity of *Buthus vesiculatus* and its type locality remained unclear for a long time. As the *Catalog of the Scorpions of the World* (2000) was being assembled and many dubious species were analyzed, one of its authors (Victor Fet) obtained a male syntype of *Buthus vesiculatus* from BMNH. Fet & Lowe (2000) transferred this species to the genus *Mesobuthus* and designated, among BMNH syntypes of *M. vesiculatus*, a lectotype (juv. ♂ from “Astracan, Iran”) (BMNH) and three paralectotypes: 1 ♀, 1 juv ♂ (BMNH), “Astracan, Iran”, 1 ♀ (BMNH), locality unknown (Fet & Lowe, 2000: 180).

Mesobuthus vesiculatus proved to be an extremely rare species: it has not been collected again for 100 years until three specimens were found in Esfahan Province of Iran (Kashan and Main Abad), by V. Vignoli and P. Crucitti (Vignoli et al., 2003). These specimens were compared by F. Kovařík to the paralectotype (No. 1893.10.29.6) of *Mesobuthus vesiculatus* from BMNH. Vignoli et al. (2003) noted that this “species is well characterized by its inflated telson and very short aculeus.”

At the same time, synonymy and geographic distribution of *Mesobuthus vesiculatus* remained a subject of confusion. In 1998, V. Fet discovered specimens from Esfahan Province identified by R.J. Whittick in 1939 as “*Buthus gabrielis* Werner” in Field Museum

of Natural History (FMNH), Chicago, USA (Whittick, 1955). An obscure species *Buthus gabrielis* was described by Werner (1929) from Rudbar between Minab (Hormozgan Province) and Bam (Kerman Province). FMNH specimens also had a handwritten identification label by W. D. Sissom dated 1994, “*Mesobuthus gabrielis* (Werner)” (Navidpour et al., 2011: fig. 15). Based on these specimens, Fet & Lowe (2000: 180) synonymized *Buthus gabrielis* with *Mesobuthus vesiculatus*. However, according to a recent study (Navidpour et al., 2011), this synonymy is dubious. These authors again studied FMNH specimens from Esfahan Province, which indeed proved to be *M. vesiculatus*. As they noted, “the holotype of *Buthus gabrielis* Werner, 1929 was never revised and probably was destroyed during World War II. ... if we judge *Buthus gabrielis* Werner, 1929 by the type locality rather than by the FMNH specimens, we must allow for the possibility that it may be a synonym of *Sassanidotus gracilis*” (Navidpour et al., 2011). Therefore, some records of *Buthus gabrielis* in literature may not refer to *Mesobuthus vesiculatus*.

Karataş & Garkheloo (2012) recently published a detailed redescription of *M. vesiculatus* based on specimens collected from two localities in Iran: Bokan (36°31'N, 46°12'E; 1400 m a.s.l.) in West Azerbaijan Province, and Bonab (37°20'N, 46°03'E; 1300 m a.s.l.) in East Azerbaijan Province.

At the same time, the exact type locality of *Mesobuthus vesiculatus* as given by Pocock (“Astracan”) until now remained unresolved. It should not be confused with Astrakhan, a Russian city and a province on Lower Volga, near the northern shores of the Caspian Sea. (This historical name also has been often spelled “Astracan”).

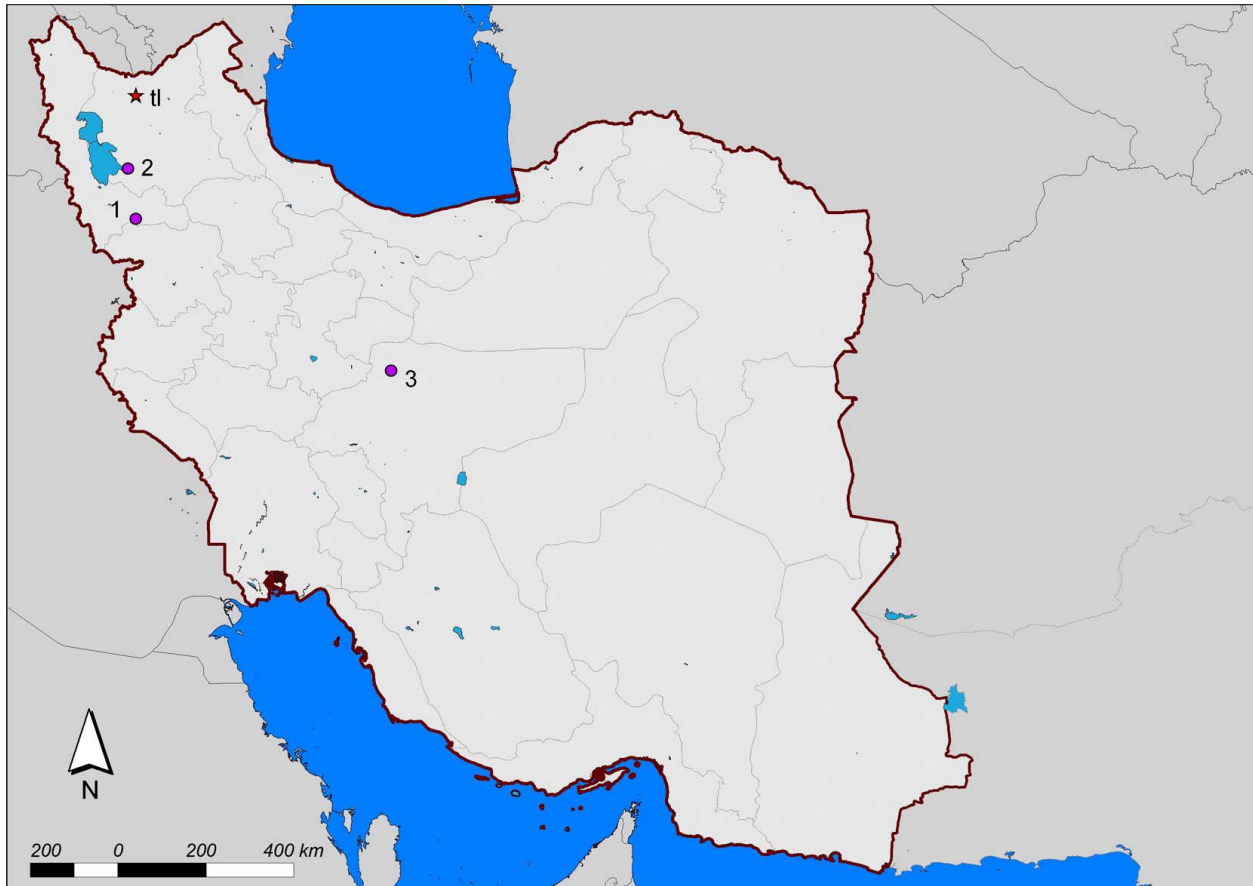


Figure 1: Type locality and distribution of *Mesobuthus vesiculatus* in Iran: star (tl) represents the type locality, Astarqān; circles denote the confirmed localities, (1) Bonab, (2) Bokan, (3) Kashan.

After a detailed search for the locality named “Astracan” in Iran we found a village named Astarqān, at 38°32'N, 46°13'E, ca. 1600 m a.s.l. It is located to the north of Tebriz, close to Marand and Kiamaky Wildlife Reserve, in the East Azerbaijan Province. In our opinion, this is the type locality of *Mesobuthus vesiculatus*, correctly spelled as “Astarqān” (Farsi, یاستسور مداج (ناغرتسا)). The confirmed range of this species in north-western Iran, therefore, stretches from Astarqān to Kashan (Fig. 1).

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