

On the findings of *Vaejovis mexicanus* C. L. Koch, 1836 and other scorpions in Norway (Scorpiones: Vaejovidae, Euscorpiidae, Hemiscorpiidae)

ROLANDO TERUEL¹ & JAN OVE REIN²

¹ Centro Oriental de Ecosistemas y Biodiversidad (BIOECO), Museo de Historia Natural “Tomás Romay”; José A. Saco # 601, esquina a Barnada; Santiago de Cuba 90100; CUBA

⁴ Medical Library, Norwegian University of Science & Technology (NTNU), Parkbygget, St. Olavs Hospital HF; N-7006 Trondheim; NORWAY

Abstract:

In the present note we record the unusual finding of a live adult female *Vaejovis mexicanus* C. L. Koch, 1836 in southwestern Norway. Also, other exotic scorpion findings for this Scandinavian country are briefly summarized.

KEY WORDS: Scorpiones, *Vaejovis mexicanus*, Norway.

Norway is located extremely north of the natural distribution of scorpions and therefore, there are no native species of this arachnid order found in this country. Nevertheless, commercial trading is active and therefore, some scorpions by chance have reached this country and have survived for some months. Although some examples have been found inside houses, there are no published records for this country. In this contribution, we summarize all Norwegian scorpion findings which are known to us.

In late November 2008, the second author (JOR) received an e-mail from Knut Inge Ørland concerning the unusual finding of a live scorpion inside the bathroom of his home at Stavanger (Rogaland, southwestern Norway). At the time, the scorpion was sent alive to us and upon initial examination we immediately realized it to be an adult female belonging to the family Vaejovidae Thorell, 1876, and most probably a member of its type genus *Vaejovis* C. L. Koch, 1836. After preservation the specimen was carefully studied and this tentative identification was confirmed, as this specimen demonstrated to belong to the type species of the genus: *Vaejovis mexicanus* C. L. Koch, 1836. By comparing the specimen to the excellent redescription of this taxon recently published by Fet & Soleglad (2007), we can report that our specimen matches perfectly all main character diagnostic for *V. mexicanus*: trichobothrial pattern, dentition of pedipalp fingers, pectinal structure and tooth count, setal armature of the tarsi, sculpture of the body and appendages, size, and color pattern. Herein we include two color photos of this specimen taken when it was still alive in captivity (figure 1), and after ethylic preservation (figure 2). It is deposited in the first author's personal collection (RTO), under the accession number Sco-0399.

Once the identity of the scorpion was established, the important questions of where it originated and how it finally ended in Norway, alive, inevitably arose. Fortunately, we could



Figure 1: Adult female *Vaejovis mexicanus* found in Norway, still alive in captivity. **Figure 2:** Same specimen as above, preserved and photographed immersed in 80% ethanol.

obtain all this information from K. I. Ørland himself: about one year ago, he had a Swedish lodger who visited Mexico City in January 2008, and traveled to Valle de Bravo for paragliding, returning to his home in Norway a few weeks ago. Evidently, the scorpion entered into his luggage in one of those two localities and was inadvertently carried back to Norway. Mexico City is the current type-locality for *V. mexicanus* (see Fet & Soleglad, 2007), and Valle de Bravo is just about 100 km to the west, well inside the distribution currently known for this species (Sissom, 2000; Fet & Soleglad, 2007).

It is interesting to note that this scorpion succeeded in surviving on its own from January to November 2008, including the harsh Norwegian winter. The reason for this is probably that the scorpion stayed in heated areas inside the house. Outside survival would not have been possible due to the extremely cold temperature. It was in very good shape when it was found, and even during the short time it was kept alive in captivity it wasn't especially interested in the crickets that were supplied as food, even though, eventually, all of them were eaten. This is interesting as Norwegian homes very rarely are infested with cockroaches and other potential prey species

It is interesting to point out that this female *V. mexicanus* possesses in its right pedipalp chela the same minor teratology previously described by Teruel (2003) for other 31 scorpion species, which has been attributed to mating immediately after the last ecdysis, before the tegument has completely sclerotized. This anomaly is visible in our figures 1-2.

Last, but not least, herein we took the opportunity to include all other scorpion findings in Norway which have been made available to us:

- 1.- *Lychas* sp. [aff. *mucronatus* (Fabricius, 1798) (Buthidae); juvenile specimen identified from a low-quality color photo only]. One specimen found in March 2009, in a house in Oslo. Origin uncertain, but the house is located in a neighborhood occupied by many Asian immigrants and thus the scorpion most probably came as a stowaway with food imports.
- 2.- *Euscorpium carpathicus candiota* Birula, 1903 (Euscorpidae). One specimen found in 2001, in a house of a town at southern Norway, where some family members had been recently on holiday in Crete (Greece). Scorpion probably was a stowaway in their luggage.
- 3.- *Euscorpium* sp. (Euscorpidae). One specimen found in the late '90s, inside a box carrying a statue sent from Italy to the University of Trondheim.
- 4.- *Liocheles* sp. (Hemiscorpidae). One specimen found in 2001, in a store in southern Norway. Came as a stowaway with a food import from Thailand.

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