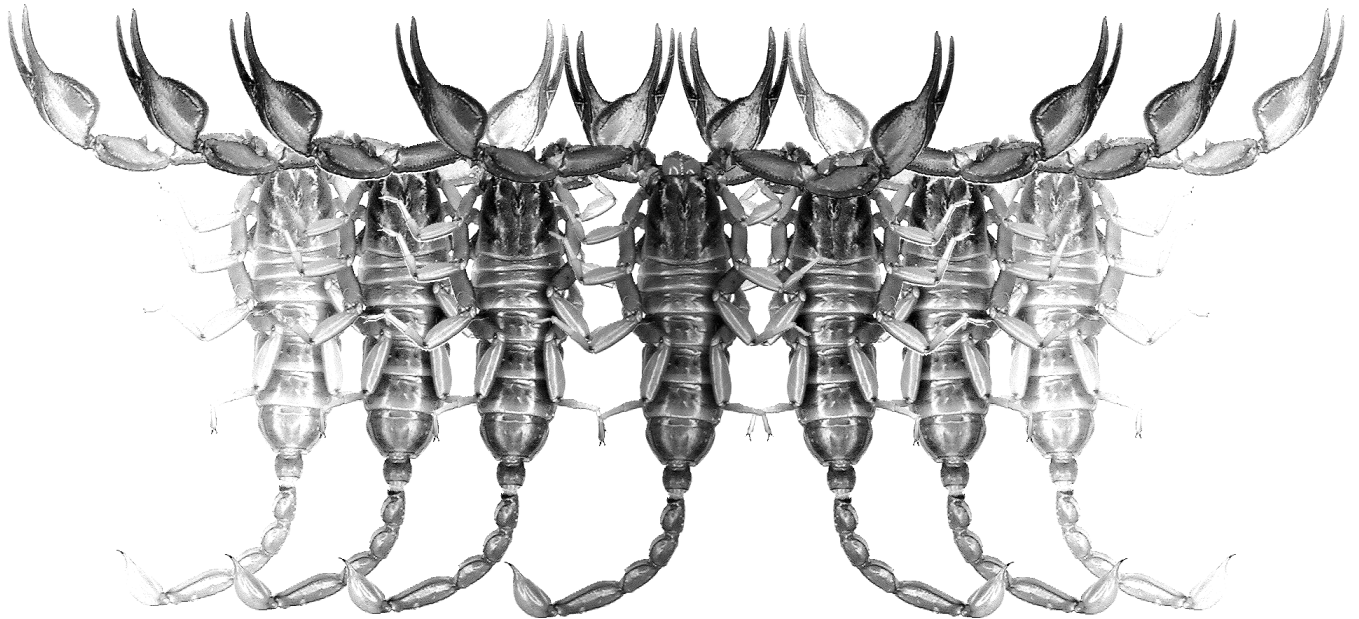


# *Euscorpius*

Occasional Publications in Scorpiology



**Scorpions 2011**

John L. Cloudsley-Thompson 90<sup>th</sup> Birthday Commemorative Volume

## **Scorpions in Ancient Egypt**

Hisham K. El-Hennawy

**August 2011 – No. 119**

# *Euscorpius*

## Occasional Publications in Scorpiology

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*Euscorpius* is the first research publication completely devoted to scorpions (Arachnida: Scorpiones). *Euscorpius* takes advantage of the rapidly evolving medium of quick online publication, at the same time maintaining high research standards for the burgeoning field of scorpion science (scorpiology). *Euscorpius* is an expedient and viable medium for the publication of serious papers in scorpiology, including (but not limited to): systematics, evolution, ecology, biogeography, and general biology of scorpions. Review papers, descriptions of new taxa, faunistic surveys, lists of museum collections, and book reviews are welcome.

### Derivatio Nominis

The name *Euscorpius* Thorell, 1876 refers to the most common genus of scorpions in the Mediterranean region and southern Europe (family Euscorpiidae).

*Euscorpius* is located on Website '<http://www.science.marshall.edu/fet/euscorpius/>' at Marshall University, Huntington, WV 25755-2510, USA.

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- **MCZ**, Museum of Comparative Zoology, Cambridge, Massachusetts, USA
- **MNHN**, Museum National d'Histoire Naturelle, Paris, France
- **NMW**, Naturhistorisches Museum Wien, Vienna, Austria
- **BMNH**, British Museum of Natural History, London, England, UK
- **MZUC**, Museo Zoologico "La Specola" dell'Universita de Firenze, Florence, Italy
- **ZISP**, Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia
- **WAM**, Western Australian Museum, Perth, Australia
- **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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Publication date: 7 August 2011

## Scorpions in ancient Egypt

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### Summary

The ancient Egyptians knew the scorpion and its toxicity, and venerated it since pre-dynastic era. They used the scorpion as a king's name, a name of a nome (county), and a symbol to their goddess, Serqet, that protects the body and the viscera of the dead, and that accompanies them in their journey to the afterlife. They had medical prescriptions and magical spells to heal the stings. Since the 5<sup>th</sup> dynasty, the title of a "Follower of Serket" was given to clever physicians. Scorpions are most famously depicted on Horus Cippus, a talisman featuring Horus the Child holding in his hands figures of serpents, scorpions, and dangerous animals. A drawing of a scorpion with two metasomas was found in the tomb of the pharaoh Seti I (1290–1279 BC), probably the first record of this abnormality, more than 13 centuries before Pliny the Elder.

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### Scorpion in the ancient Egyptian myth and reality

Scorpions have influenced the imagination of the peoples of the Orient and the Mediterranean since earliest times. In ancient Egypt, scorpions were frequently depicted in tombs and on monuments. They are mentioned in the Ebers papyrus ("How to Rid the House of Scorpions") and in several passages of the Book of the Dead (Cloudsley-Thompson, 1990).

The writings about scorpions found on ancient Egyptian papyri were confined to myths, to advice on how to get rid of the scorpion and its venom, or how to heal its sting. Nothing was recorded about geography of scorpions, which was first noted by Aristotle (384–322 BC) (Cloudsley-Thompson, 1990; Fet et al., 2009).

The dwellers on the Nile in ancient Egypt knew the scorpion and venerated it since pre-dynastic era (Fig. 1). They used the scorpion as a king's name, Scorpion I (Fig. 2) and Scorpion II (Fig. 3), a name of a nome (county) (Fig. 4), and a symbol to their goddess Serqet (in addition to other goddesses).

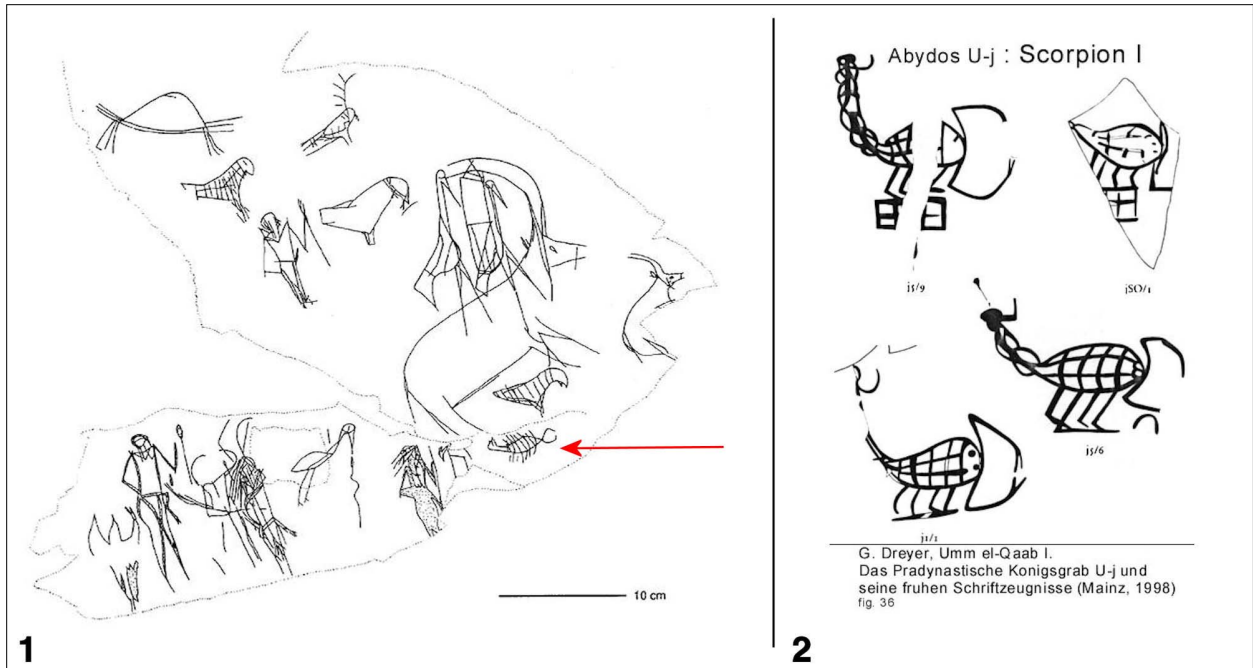
The ancient Egyptians deified scorpion as Serqet, the goddess that protects the body and the viscera of the dead (Figs. 5–7), and that accompanies them in their journey to the afterlife (Fig. 8). Since the 5<sup>th</sup> dynasty (2465–2323 BC), clever physicians were given the title of a "Follower of Serqet", "One who wields power over the goddess Serqet" (or "is powerful over Serqet's venom" (Ghalioungui & El-Dawakhly, 1965). They had medical prescriptions and magical spells to heal the stings of scorpions (Budge, 1901; Kamal, 1964).

The goddess Serqet also had its place in the sky of the ancient Egyptians, among circumpolar stars (Fig. 9). She was mentioned in holy texts of ancient Egypt since the "Pyramids texts" in the Old Kingdom (Fig. 10) to the Book of the Dead in the New Kingdom (Fig. 11).

Scorpions are most famously represented on so-called Horus Cippi. "Towards the close of the 26<sup>th</sup> Dynasty, when superstition in its most exaggerated form was general in Egypt, it became the custom to make house talismans in the form of small stone stelae, with rounded tops, which rested on bases having convex fronts. On the front of such a talisman was sculptured in relief a figure of Horus the Child (Harpokrates), standing on two crocodiles, holding in his hands figures of serpents, scorpions, a lion, and a horned animal, each of these being a symbol of an emissary or ally of Set, the god of Evil (Fig. 12). ... The reverse of the stele and the whole of the base were covered with magical texts and spells, and when a talisman of this kind was placed in a house, it was supposed to be directly under the protection of Horus and his companion gods, who had vanquished all the hosts of darkness and all the powers of physical and moral evil. ... They are usually called "Cippi of Horus." The largest and most important of all these "cippi" is commonly known as the "Metternich Stele" (Budge, 1901) (Fig. 13).

The scorpion figures were also found in rings and other human tools in ancient Egypt (Figs. 14, 15).

On the "Metternich Stele" that was unearthed in 1828 at Alexandria, and was given to Prince Metternich by Muhammad Ali Pasha, the legend of the wanderings



**Figures 1–2:** 1. The Gebel Tjauti tableau in the Theban Desert, probably a record of a military expedition from about 3200 BC. 2. Inscriptions of King Scorpion I (Dynasty 00) (after Dreyer, 1998). Red arrow points to the scorpion.



**Figure 3:** Macehead of King Scorpion II (Dynasty 0), Hierakonpolis (Ca. 3100 BC), and its detail (Ashmolean Museum, Oxford). Red arrow points to the scorpion.



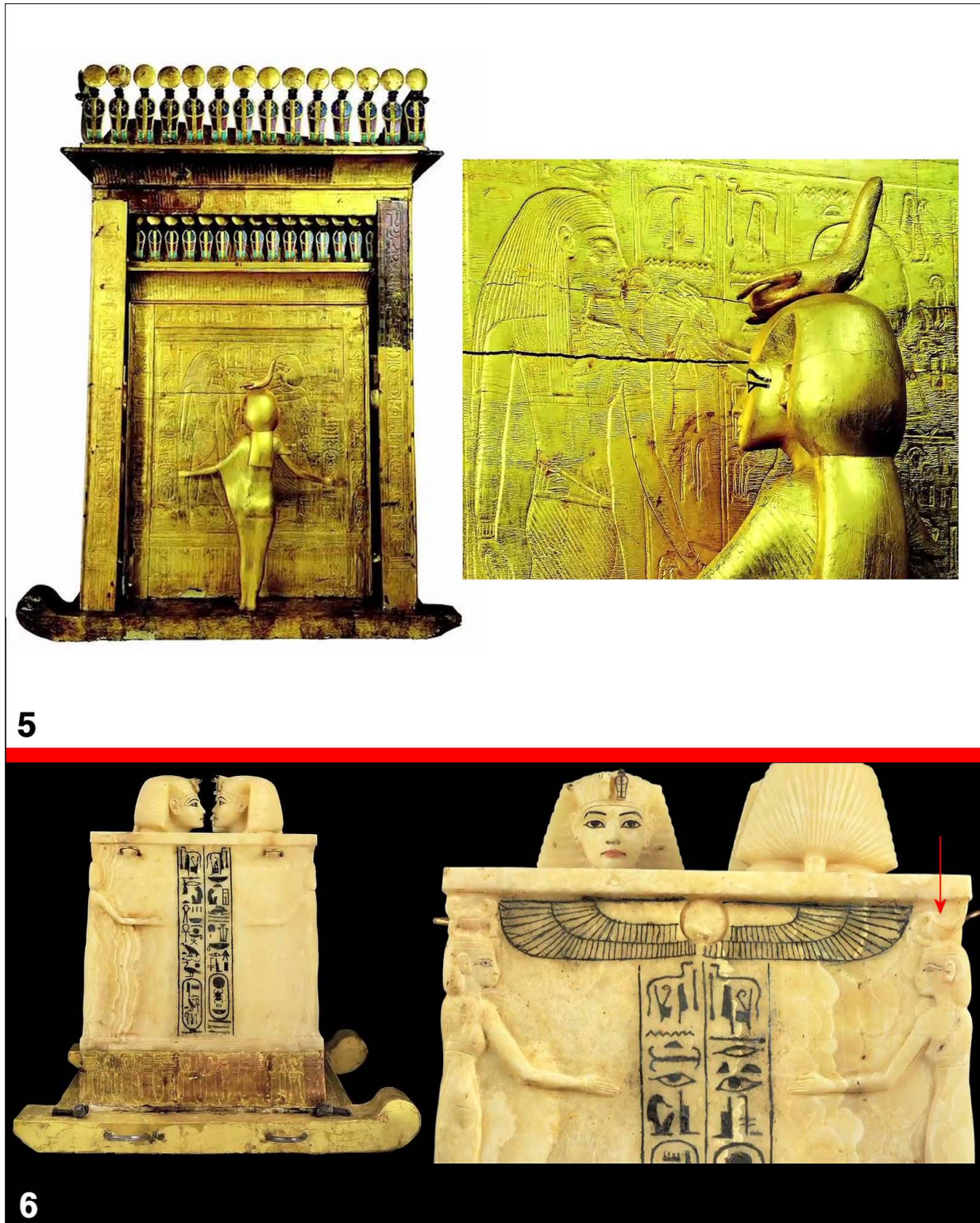
**Figure 4:** Scorpion nome (county) on the Tehnu palette, pre-dynastic period (Egyptian Museum of Cairo). Red arrow points to the scorpion.

of Isis was cut in hieroglyphs during the reign of Nectanebus I, between 373 and 360 B.C. The legend is narrated by the goddess herself, who says (extract):

“I left the house of Set in the evening, and there accompanied me Seven Scorpions, that were to travel with me, and sting with their stings on my behalf. Two of them, Tefen and Befen, followed behind me, two of them, Mestet and Mestetef, went one on each side of me, and three, Petet, Thetet, and Maatet, prepared the way for me. I charged them very carefully and adjured them to make no acquaintance with any one, to speak to none of the Red Fiends, to pay no heed to a servant (?), and to keep their gaze towards the ground so that they might show me the way. And their leader brought me to Pa-Sui, the town of the Sacred Sandals, at the head of the district of the Papyrus Swamps. When I arrived at Teb, I came to a quarter of the town where women dwelt. And a certain woman of quality spied me as I was journeying along the road, and she shut her door in my face, for she was afraid because of the Seven Scorpions that were with me. Then they took counsel concerning her, and they shot out their poison on the tail of Tefen. As for me, a peasant woman called Taha opened her door, and I went into the house of this humble woman. Then the scorpion Tefen crawled in under the door of the woman Usert [who had shut it in my face], and stung her son, and a fire broke out in it; there was no water to put it out, but the sky sent down rain, though it was not the time of rain. And the heart of Usert was sore within her, and she was very sad, for she knew not whether her son would live or die; and she went through the town shrieking for help, but none came out at the sound of her voice. And I

was sad for the child's sake, and I wished the innocent one to live again. So I cried out to her, saying, Come to me! Come to me! There is life in my mouth. I am a woman well known in her town. I can destroy the devil of death by a spell which my father taught me. I am his daughter, his beloved one.”

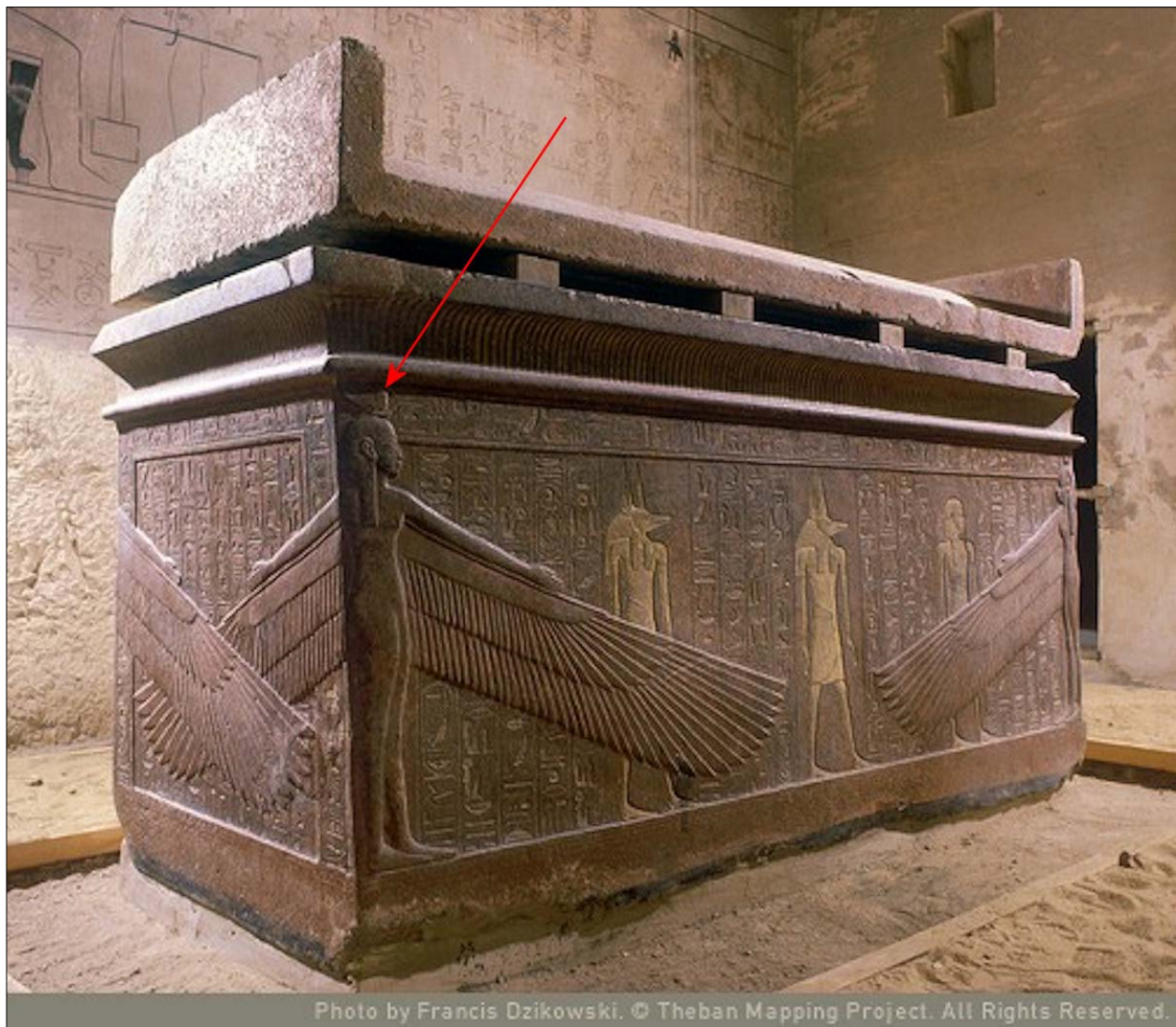
Then Isis laid her hands on the child and recited this spell: “O poison of Tefent, come forth, fall on the ground; go no further. O poison of Befent, come forth, fall on the ground. I am Isis, the goddess, the mistress of words of power. I am a weaver of spells, I know how to utter words so that they take effect. Hearken to me, every reptile that biteth (or stingeth), and fall on the ground. O poison of Mestet, go no further. O poison of Mestetef, rise not up in his body. O poison of Petet and Thetet, enter not his body, O poison of Maatet, fall on the ground. Ascend not into heaven, I command you by the beloved of Ra, the egg of the goose which appeareth from the sycamore. My words indeed rule to the uttermost limit of the night. I speak to you, O scorpions. I am alone and in sorrow, and our names will stink throughout the nomes... The child shall live! The poison shall die! For Ra liveth and the poison dieth. Horus shall be saved through his mother Isis, and he who is stricken shall likewise be saved.” Meanwhile the fire in the house of Usert was extinguished, and heaven was content with the utterance of Isis. Then the lady Usert was filled with sorrow because she had shut her door in the face of Isis, and she brought to the house of the peasant woman gifts for the goddess, whom she had apparently not recognised.



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**Figures 5–6:** 5. The ancient Egyptian scorpion goddess Serqet as one of the four goddesses protecting the cabinet that contained the viscera of the pharaoh Tutankhamen, New Kingdom, ca. 1350 BC (Egyptian Museum of Cairo.). 6. Serqet on the internal alabaster cabinet of canopic jars that contained the viscera of the pharaoh Tutankhamen, New Kingdom, ca. 1350 BC (Egyptian Museum of Cairo.). Red arrow points to the scorpion.



**Figure 7:** Serquet as one of the four goddesses (Isis, Nephthys, Serquet, and Neit) protecting the sarcophagus of the pharaoh Horemheb, New Kingdom, Dynasty 18, in his tomb in the Valley of the Kings, Luxor. Photograph by Francis Dzikowski, Theban Mapping Project. Red arrow points to the scorpion.

The spells of the goddess produced, of course, the desired effect on the poison, and we may assume that the life of the child was restored to him. The second lot of gifts made to Isis represented his mother's gratitude" (Budge, 1914).

From this extract, we see that the ancient Egyptians were aware of the toxicity of scorpions, and knew that scorpion venom was fatal for children. They knew that the "tail" is used for stinging and that it contains poison. Their method to get the poison out of the human body was mainly by magical spells.

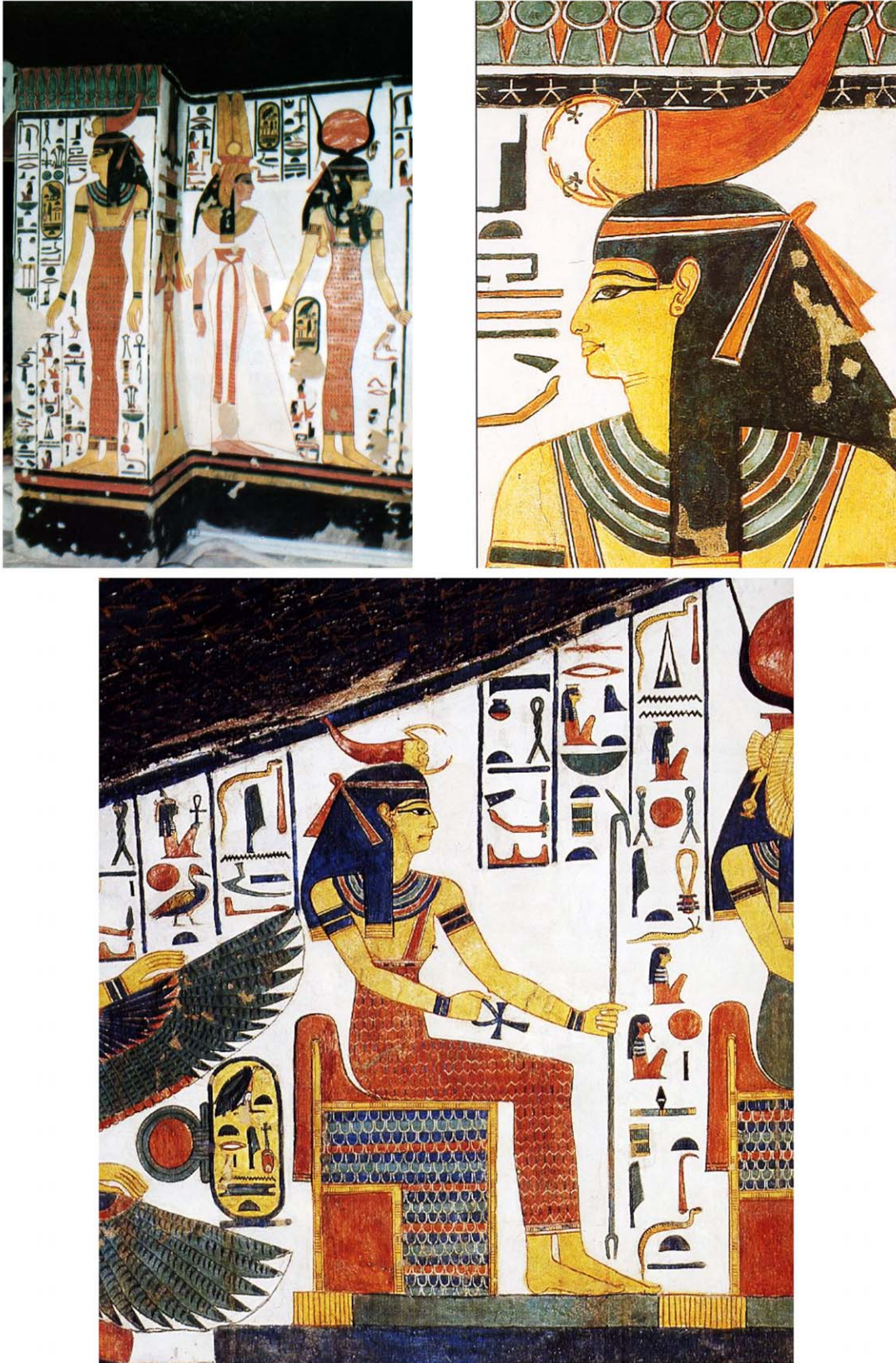
### Scorpion biology as seen by the ancient Egyptians

Scorpions were mentioned in many ancient Egyptian papyri and inscriptions dealing with myths, religious

rituals, astrology, medicine, and magic spells, and that they were well studied from the archaeological point of view, such as the study of Stoof (2002).

However, we did not find inscriptions or writings about the kinds and habits of scorpions. Our recent paper discussed, in brief, the toxicity and some morphological characters of scorpions in ancient Egypt (El-Hennawy, 2011). It is evident that ancient Egyptians were aware of the toxicity of the scorpion venom and knew how the scorpion uses it. They recorded their methods to heal scorpion sting. They mostly dealt with one scorpion species, the most widespread in the country and the most venomous, especially for children. This probably refers to *Leiurus quinquestriatus* (Buthidae).

Inscriptions and drawings of scorpions in the ancient Egypt were sometimes detailed (Fig. 3), and sometimes reduced (Fig. 5). The ancient artist noticed



**Figure 8:** Serqet on the walls of the tomb of queen Nefertari, the beloved wife of the pharaoh Ramses II, New Kingdom, Dynasty 19, in the Valley of the Queens, Luxor.



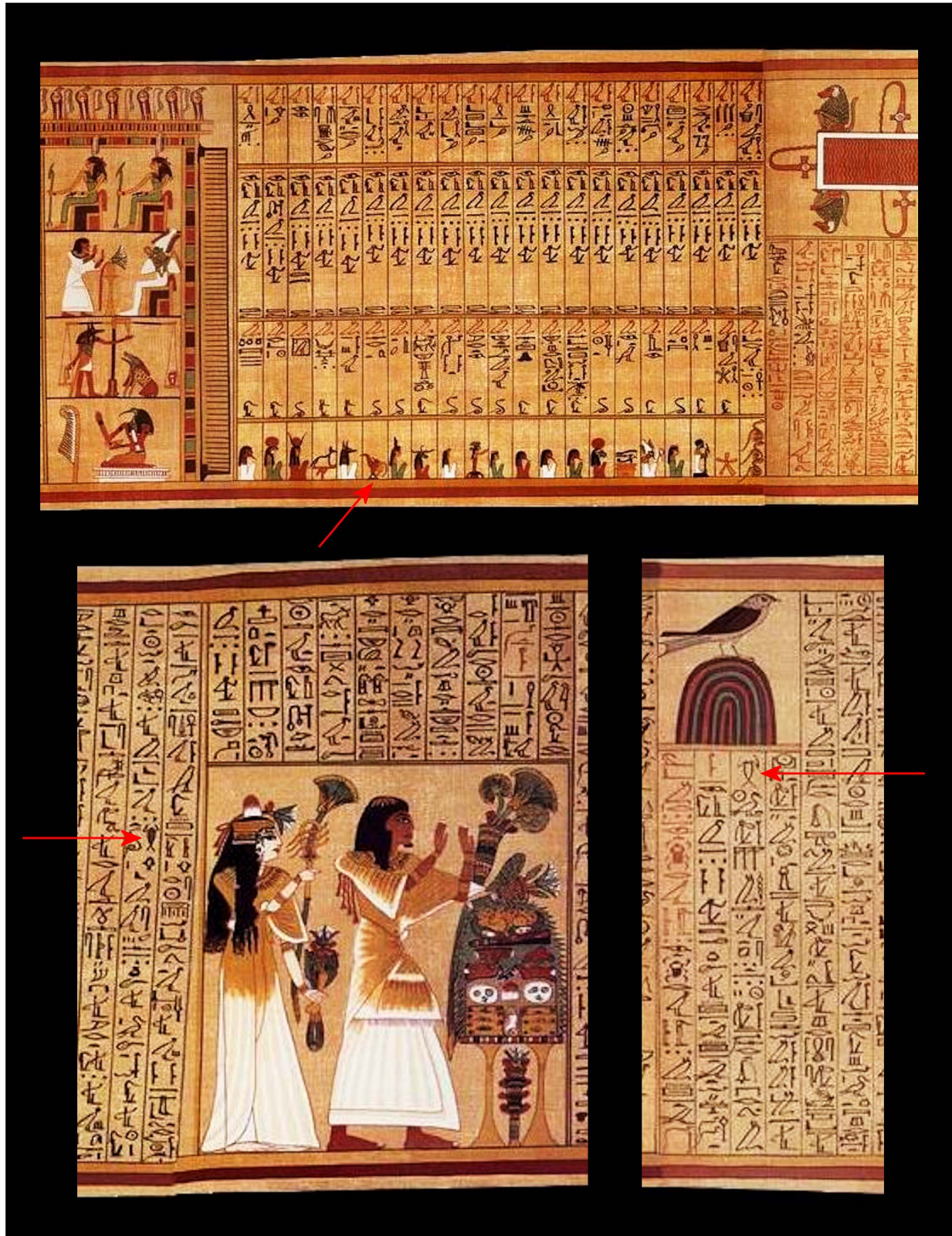


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**Figures 9–10:** 9. Serquet (as a woman) on the ceiling of the tomb of the pharaoh Seti I, New Kingdom, Dynasty 19, in the Valley of the Kings, Luxor. Photograph by Francis Dzikowski, Theban Mapping Project. 10. Pyramids texts of Unas pyramid, Old Kingdom, Dynasty 5, Saqqara. Red arrows point to the scorpion.



**Figure 11:** Three figures of Serqet in the Book of the Dead, Ani Papyrus, New Kingdom (British Museum). Red arrows point to the scorpion.



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Figures 12–13: 12. Horus Cippus (Brooklyn Museum, New York). 13. Metternich Stele (Metropolitan Museum, New York).

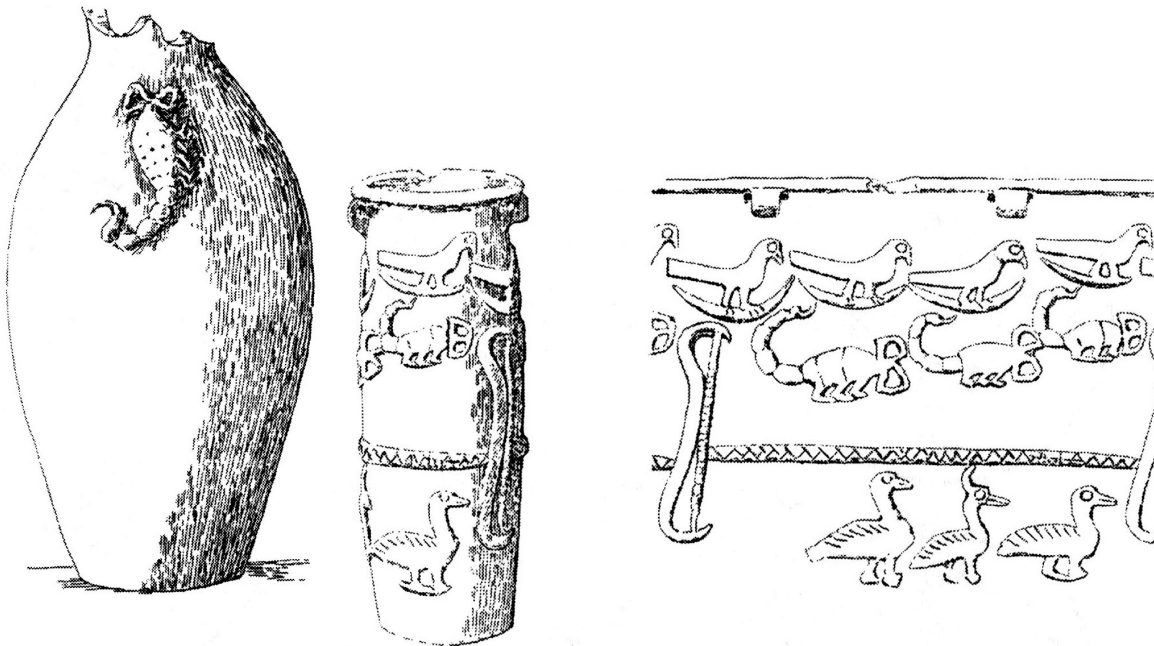


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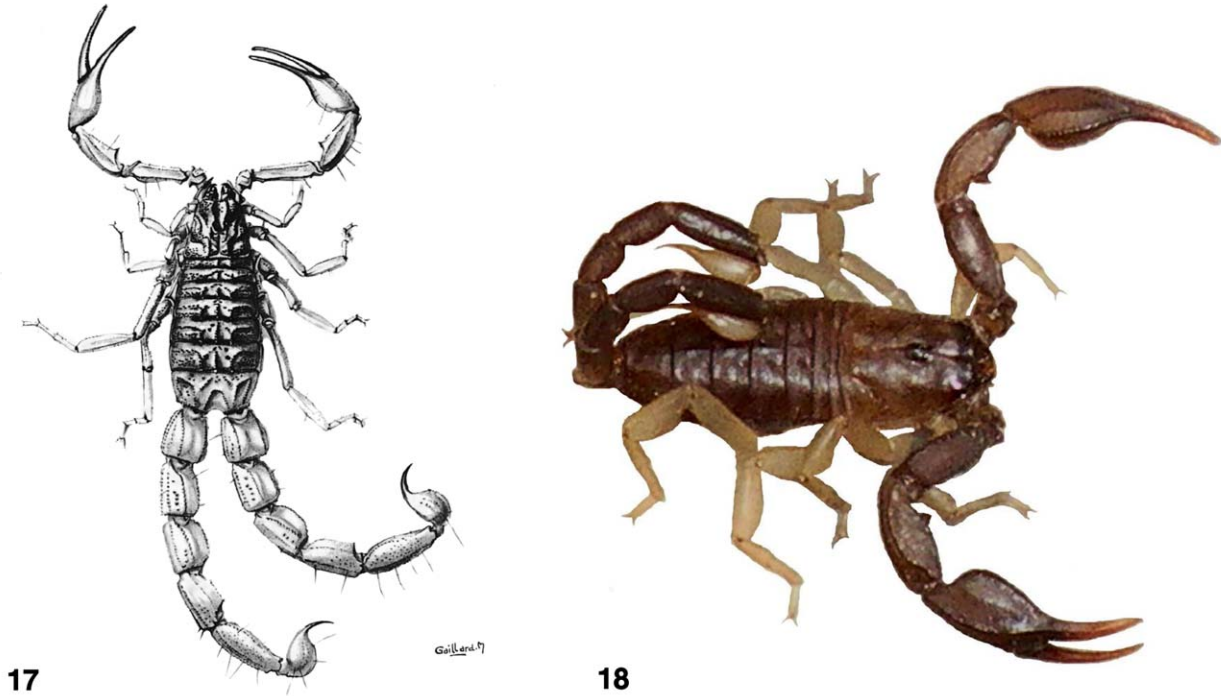


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**Figure 14–15:** Tools to protect their users from a scorpion sting. 14. A ring. 15. A foot rest sheet (Metropolitan Museum).



**Figure 16:** Bas-relief of scorpions on a jar and a slender seal (and its print) from Hierakonpolis, Dynasty 0 (after Stoof, 2002).



**Figures 17–18:** Scorpions with double metasoma. 17. *Hottentota alticola* (Pocock), adult female from Afghanistan, with two perfect metasomas (after Vachon, 1953). 18. Juvenile female of *Euscorpius flavicaudis* with a double metasoma (after Lourenço & Hypolite, 2010).



**Figure 19:** A scorpion with two tails on a wall of the tomb of the pharaoh Seti I, New Kingdom, Dynasty 19, in the Valley of the Kings, Luxor. Photographed by Francis Dzikowski, Theban Mapping Project.

the body segmentation and the number of legs (eight) (Figs. 2, 13–15). Sometimes his scorpion had only six legs (Fig. 16) because the first pair of legs was concealed under the pedipalps. Sometimes the scorpion had more segments and more legs (Fig. 12), to look more

fearful. The pedipalp was sometimes drawn with opened fingers (Fig. 2, 8, 14), indicating that the scorpion can use them for catching prey. The stinger was mostly evident (Fig. 2, 3, 14–16).

## The Two-tailed Scorpion

A rare anomaly in scorpions, which has attracted much attention, is doubling of the “tail” (metasoma) (Figs. 17–18). The anomaly was known in antiquity, for Pliny, citing Aelian, placed these double-tailed scorpions in a class by themselves (Vachon, 1953). Cloudsley-Thompson (1990) stated that Pliny’s most interesting remark about scorpions was that some have a pair of stings. In his 25<sup>th</sup> chapter “*Of Scorpions*”, Book 11 of his “*Naturalis Historia*”, Pliny the Elder, or Gaius Plinius Secundus (23–79 AD), the Roman naturalist, stated that “some have double stings” (Pliny, 1601).

The developmental anomalies are well known in scorpions, the most common being the duplication of various posterior body segments (Hjelle, 1990). Only a limited number of cases of complete duplication of the metasoma and telson in scorpions have been reported in the modern literature. Those cases were reviewed by Sissom & Shelley (1995) and Lourenço & Hypolite (2010) (Fig. 18).

The most interesting drawing of a scorpion in ancient Egypt is that found in the tomb of the pharaoh Seti I (1290–1279 BC), New Kingdom, Dynasty 19, in the Valley of the Kings, Luxor. The scorpion clearly had two metasomas (Fig. 19). This may be the first record, more than 13 centuries before Pliny the Elder.

## Acknowledgments

I am most grateful to Victor Fet (Marshall University, Huntington, USA) and to Wilson Lourenço (MNHN, Paris) who suggested and planned this volume in honor of John Cloudsley-Thompson who enriched the field of scorpology, and wrote the best papers on scorpion mythology and folklore (Cloudsley-Thompson, 1990).

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