THE FAUNA OF AFGHANISTAN IV: SCORPIONIDA I.

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Abstract

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The Moravian Museum in Brno holds 217 specimens of Afghan scorpions collected in 1963–66. The collection contains 71,4 % of the species and 83,3 % of the genera known to occur in Afghanistan. Represented are *Androctonus amoreuxi, Hottentotta alticola, Mesobuthus eupeus, Olivierius caucasicus* and *Orthochirus scrobiculosus* (possibly including *O. bicolor*), all belonging in the family *Buthidae*. The occurrence of *A. amoreuxi* near the town of Jalalabad extends the northern range of the species. The published data presently available do not allow mutual separation of *O. scrobiculosus* and *O. bicolor*.

Key words: Afghanistan, *Scorpionida, Buthidae, Androctonus, Hottentotta, Mesobuthus, Olivierus, Orthochirus.*

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Introduction

In the Moravian Museum at Brno are deposited 217 specimens of scorpions which were collected in Afghanistan in 1963–64 by O. Jakeš, in 1965 by D. Povolný, in 1966 by D. Povolný and F. Tenora, and in 1965–66 by J. Šimek. I examined the material in October 1991, identified the scorpions which had been grouped by localities only, and sorted them by localities and species. Apart from *Androctonus amoreuxi* which is mounted dry, the scorpions are preserved in 75 % alcohol.

Explanatory notes

Data following the name of collector (e. g. PT 8, Š 15) give the more accurate description of the locality – see Jakeš, Povolný, 1967.

Results of determination

BUTHIDAE Simon, 1879

Androctonus amoreuxi (Audouin, 1812)

East Afghanistan, Prov. Nengrahar: 2 km SW of Jalalabad, 13. II. 1966 (leg. D. Povolný and F. Tenora, PT 8), 1 ♀.

Hottentotta alticola (Pocock, 1895)

Central Afghanistan, Prov. Kabul: Poli – Charky, 25. XI. 1965 (leg. J. Šimek, Š 15), 1 ♀ 1 ♂.

East Afghanistan, Prov. Nengrahar: Jalalabad, 28. I.–30. III. 1965 (leg. D. Povolný), 12 ♀ 12 ♂ 14 juv.: 8 km ESE of Jalalabad, 16. II. 1966 (leg. D. Povolný and

F. Tenora, PT 11), 1 ♀ 1 ♂ 1 juv.: ibid., 28. II. 1966 (PT 22), 1 ♀; ibid., 5. III. 1966 (PT 25), 1 ♀ 1 ♂ 1 juv.; 10 km ESE of Jalalabad, 16. II. 1966 (leg. D. Povolný and F. Tenora, PT 15), 1 juv.; ibid., 21. II. 1966 (PT 16), 1 ♀; ibid., 23. II. 1966 (PT 18), 1 ♀ 2 juv.; 12–20 km ESE of Jalalabad, 7. III. 1966 (leg. D. Povolný and F. Tenora, PT 26), 1 ♂ 2 juv.; ibid., 8. III. 1966 (PT 27), 2 ♂ 2 juv.; ibid., 16. III. 1966 (PT 36), 1 ♀ 3 ♂ 1 juv.; Jalalabad, V. 1967 (leg. D. Povolný), 3 ♀ 1 ♂; Nemla, 18. II. 1966 (leg. D. Povolný and F. Tenora, PT 14), 2 ♀ 1 juv.; Samrchel, 15. II. 1966 (leg. D. Povolný and F. Tenora, PT 9), 4 ♀ 7 juv.

Mesobuthus eupeus (C. L. Koch, 1813)

East Afghanistan, Prov. Nengrahar: Jalalabad, 28. I.–30. III. 1965 (leg. D. Povolný), 7 ♀ 3 ♂ 7 juv.; 8 km ESE of Jalalabad, 16. II. 1966 (leg. D. Povolný and F. Tenora, PT 11), 2 ♀ 1 juv.; ibid., 28. II. 1966 (PT 22), 1 ♀; ibid., 1. III. 1966 (PT 23), 1 ♀; 2 km SW of Jalalabad, 13. II. 1966 (leg. D. Povolný and F. Tenora, PT 8), 2 juv.; 10 km ESE of Jalalabad, 19. II. 1966 (leg. D. Povolný and F. Tenora, PT 15), 3 ♀; ibid., 21. II. 1966 (PT 16), 1 ♀ 2 juv.; 12–20 km ESE of Jalalabad, 7. III. 1966 (leg. D. Povolný and F. Tenora, PT 26), 1 ♀ 1 ♂; ibid., 8. III. 1966 (PT 27), 2 ♀; ibid., 16. III. 1966 (PT 36), 1 ♂.

North Afghanistan, Prov. Herat: Bala Murghab, 4. VII.–21. IX. 1964 (leg. O. Jakeš), 5 juv.

Olivierus caucasicus (Nordmann, 1840)

North Afghanistan, Prov. Kataghan: Kunduz, 3. X. 1965 (leg. J. Šimek, Š 8), 1 ♀ 1 ♂; ibid., 5. II. 1966 (Š 16), 3 ♀4 ♂ 12 juv.; ibid., 5. II. 1966 (Š 17), 3 ♀ 2 ♂ 15 juv.; ibid., 1.–25. V. 1966 (Š 49), 5 ♀ 3 ♂ 1 juv.

North Afghanistan, Prov. Herat: Bala Murghab, 20. III.–3. VII. 1964 (leg. O. Jakeš), 1 ex. 1 juv.; ibid., 4. VII.–18. IX. 1964, 1 ♂.

Orthochirus scrobiculosus (Grube, 1873)

East Afghanistan, Prov. Nengrahar: Jalalabad, 28. I.–30. III. 1965 (leg. D. Povolný), 1 ♀ 1 ♂ 1 juv.; 8 km ESE of Jalalabad, 8. II. 1966 (leg. D. Povolný and F. Tenora, PT 3), 1 ♂; ibid., 28. II. 1966 (PT 22), 2 ♀ 1 ♂; ibid., 1. III. 1966 (PT 23), 3 ♀ 2 ♂; ibid., 2. III. 1966 (PT 24), 3 ♀ 1 ♂; ibid., 5. III. 1966 (PT 25), 1 ♀ 1 ♂; 2 km SW of Jalalabad, 13. II. 1966 (leg. D. Povolný and F. Tenora, PT 8), 1 ♂; 10 km ESE of Jalalabad, 23. II. 1966 (leg. D. Povolný and F. Tenora, PT 18), 1 ♂ 1 juv.; 12–20 km ESE of Jalalabad, 7. III. 1966 (leg. D. Povolný and F. Tenora, PT 26), 1 ♀ 2 ♂; ibid., 16. III. 1966 (PT 36), 2 ♀ 1 ♂; 9 km SES Jalalabad, 28. III. 1966 (leg. D. Povolný and F. Tenora, PT 46), 1 ♀; Jalalabad, V. 1967 (leg. D. Povolný and col.), 1 ♀; Samrchel, 7. II. 1966 (leg. D. Povolný and F. Tenora, PT 2), 1 juv.; ibid., 15. II. 1966 (PT 9), 1 ♂.

North Afghanistan, Prov. Herat: Bala Murghab, 20. III.–3. VII. 1964 (leg. O. Jakeš), 1 ♀; ibid., 18. IX.–6. XI. 1964 (leg. O. Jakeš), 1 juv.

North Afghanistan, Prov. Maimana: Rasheed, 18. V. 1964 (leg. O. Jakeš, J 17), 2 ♀ 3 ♂ 3 juv.

Discussion

Compared with the neighbouring countries, Afghanistan is relatively poor in scorpions. For example, 34 species of two families live in Iran. All the seven

(or eight) scorpion species living in Afghanistan are found in the neighbouring countries and most of them are widely distributed.

Mesobuthus eupeus has colonised the region between Turkey (1 ♀ Turkey, Ihlara, 23. VIII. 1990 leg. M. Kaftan, coll. Kovařík) and Mongolia (Vachon, 1958; Stahnke 1967); *Hottentotta (= Buthotus) alticola* lives in Iran (Farzanpay, 1988), China (Kovařík, 1992) Tadjikistan, Afghanistan, Pakistan and India (Vachon, 1958); *Olivierus caucasicus* occurs in Turkey, the Caucasus, Iran, Afghanistan and Kazakhstan (Vachon, 1958); *Sasanidothus zarudnyi* inhabits Iran and, along with *Mesobuthus macmahoni*, Pakistan and southern Afghanistan (Vachon, 1958). However, the last two species were not found by the Czech expeditions.

Interesting is the finding of an *Androctonus amoreuxi* female near the town of Jalalabad, as according to Vachon (1958) the species occurs in southern Afghanistan only. The find near Jalalabad thus extends the northern limit of distribution of the species. *Androctonus amoreuxi* has colonised northern Africa from Morocco to Egypt (Vachon, 1952) and Israel and Iran (Vachon, 1966).

The last of the species in the collection, *Orthochirus scrobiculos*, lives in the region between the Caucasus and India. I identified all the specimens as *O. scrobiculosus*, although this may not be correct in some instances. Vachon (1958) did not exclude the existence of another "*Orthochirus sp.*?" in Afghanistan, but in his paper there is no mention of *O. bicolor* which Pocock described as an Afghan species in 1897. Levy and Amitai (1980) pointed out that according to e. g. Birula *O. scrobiculosus* seems to have many local forms, and they added that a revision of the genus is necessary. I also believe that a revision is required. Levy and Amitai (1980) stated that *O. scrobiculosus* and *O. bicolor* have many local forms which exhibit a great degree of variation, but they did not explain how these two species can be recognised from one another. Tikader and Bastawade (1983) list five species for India (*O. bicolor, O. melanurus, O. flavescens, O. pallidus, O. krishnai*).

Their *O. melanurus* is regarded by other authors (e. g. Vachon, 1966, p. 214) as a subspecies of *O. scrobiculosus*. The key published by Tikader and Bastawade (1983) contains characters which I have not been able to recognize with certainty on the Afghan material. Since no published unequivocal criteria for their mutual separation are known to me, I am forced to tentatively identify only *O. scrobiculosus* in the collection. It will be necessary to revise the Afghan material of *Orthochirus* in the future.

Summary

In the Moravian Museum at Brno are deposited 217 specimens, five species in five genera of one family of the order *Scorpionida* which were collected in Afghanistan in 1963–66. According to Vachon (1958), the scorpionid fauna of Afghanistan totals seven species in six genera of one family. The collection contains 71,4 % of the species and 83,3 % of the genera known to occur in Afghanistan.

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