Euscorpius

Occasional Publications in Scorpiology

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Derivatio Nominis

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

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- MNHN, Musee National d'Histoire Naturelle, Paris, France
- NMW, Naturhistorisches Museum Wien, Vienna, Austria
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- 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

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Scorpions of Iran (Arachnida, Scorpiones).
Part II. Bushehr Province

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Summary

The Bushehr Province of Iran contains the type localities of three scorpion taxa, *Mesobuthus eupeus phillipsii* (Pocock, 1889), *Orthochirus iranus* Kovařík, 2004, and *Scorpio maurus townsendi* (Pocock, 1900). Apart from them, *Androctonus crassicauda* (Olivier, 1807), *Compsobuthus matthiesseni* (Birula, 1905), *Hottentotta saucoyi* (Simon, 1880), *Odontobuthus bidentatus* Lourenço & Pézier, 2002, *Razianus zarudnyi* (Birula, 1903), and *Hemiscorpius lepturus* Peters, 1862 have also been known to occur in the province. Collections made by a team under Shahrokh Navidpour (Razi Reference Laboratory of Scorpion Research, Razi Vaccine and Serum Research Institute, Ahvaz, Khoozestan, Iran) reveal four additional species recorded from the province for the first time: *Buthacus macrocentrus* (Ehrenberg, 1828), *Compsobuthus jakesi* Kovařík, 2003, *Orthochirus farzanpayi* (Vachon & Farzanpay, 1987), and *Orthochirus stockwelli* (Lourenço et Vachon, 1995). In addition, *Compsobuthus persicus* sp. n. is described as a species new to science, bringing the total species count to 14. A key to all species of scorpions found in Bushehr Province is presented.

Introduction

A number of papers deal with the scorpions of Iran to some extent, but a comprehensive study of the scorpion fauna has been lacking. We therefore decided to survey the scorpions of Iran thoroughly, province by province. The fieldwork was conducted by the Razi Reference Laboratory of Scorpion Research (RRLS) team under Shahrokh Navidpour and included documentation of habitat diversity, revisitation of previously known sites, some of them type localities, and sampling of all the encountered scorpion species. All specimens are collected by UV light at night.

The first faunistic contribution of our scorpion survey of Iran has been published, and covers Khoozestan Province (Navidpour et al., 2008). The second region surveyed, the Bushehr Province, is an area for which very little is known about scorpions. The type localities of three species, *Mesobuthus eupeus phillipsii* (Pocock, 1889), *Orthochirus iranus* Kovařík, 2004, and *Scorpio maurus townsendi* (Pocock, 1900), lie within Bushehr Province, and six additional species have been documented there in the past. New collections revealed the presence of five more species of scorpions within the Bushehr Province, one of which is new to science and is described below. Apart from the new species, all others now known from Bushehr Province also occur in the neighboring Khoozestan Province (Navidpour et al., 2008).

The Bushehr Province is located in the southwest of Iran and is bordered by four other provinces: Khoozestan and Kohkiloye & Boyer Ahmad in the north, Fars in the east, and Hormozgan in the southwest; it is limited by the Persian Gulf in the west (see map in Fig. 1). Habitats in this province are diverse (see Figs. 2–3, 5–8, 20–21). Areas such as Dailam, Genaveh, Bushehr, and Delvar contain sandy deserts with clay hills covered by deep soils. Other areas such as Khormuj, Ahram, and Farashband are mountainous with rocky substrates. Elevations in this part of Iran change from 3–5 meters at the shores of the Persian Gulf to 220 meters in the northern parts of the province. Climate in this part of Iran is hot and humid for most of the year with temperatures ranging from 5°C in winter to 48°C in summer.

The team surveyed and collected scorpion species belonging to the families Buthidae, Scorpionidae, and Hemiscorpiidae, and recorded ecological and distribution data of the scorpion fauna. *Mesobuthus eupeus, Buthacus macrocentrus,* and *Odontobuthus bidentatus* were found everywhere within 15–80 m altitude, especially in soft soils of hills in the areas of Dailam,
Figure 1: Map of southwestern Asia highlighting Iran (top) and closeup of Iran showing provinces, the Bushehr province depicted in black (bottom).
Navidpour et al.: Scorpions of Bushehr Province

Genaveh, Delvar, Dayer, and Borazjan. *Hemiscorpius lepturus* was found only in the montane areas of the northern and northeastern parts of the province. Our study shows high densities and frequencies of *Odontobuthus bidentatus* and *Mesobuthus eupeus phillipsii* in the Bushehr Province, while those of *Androctonus crassicauda* and *Hottentotta saulcyi* were low. We found three species of *Compsobuthus* in the province, especially in northern and central areas, including one new species. All three species inhabit mountains with rocky substrates.

**Abbreviations.** The institutional abbreviations listed below and used throughout are mostly after Arnett et al. (1993).

- BMNH – The Natural History Museum, London, United Kingdom;
- FKCP – František Kovařík Collection, Praha, Czech Republic;
- MHNG – Museum d’Histoire naturelle, Geneva, Switzerland;
- MNHN – Muséum National d’Histoire Naturelle, Paris, France;
- NHMW – Naturhistorisches Museum Wien, Vienna, Austria;
- RRLS – Razi Reference Laboratory of Scorpion Research, Razi Vaccine and Serum Research Institute, Sepah St., Hejrat Sq., Ahvaz, Khoozestan, Iran;
- ZISP – Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia;
- ZMHB – Museum für Naturkunde der Humboldt-Universität zu Berlin, Germany;
- ZMUH – Zoologisches Institut und Zoologisches Museum, Universität Hamburg, Germany.

**List of scorpions of Bushehr Province**

Family **Buthidae** C. L. Koch, 1837

- *Androctonus crassicauda* (Olivier, 1807)
- *Buthacus macrocentrus* (Ehrenberg, 1828)
- *Compsobuthus jakesi* Kovařík, 2003
- *Compsobuthus matthiesseni* (Birula, 1905)
- *Compsobuthus persicus* sp. n.
- *Hottentotta saulcyi* (Simon, 1880)
- *Mesobuthus eupeus phillipsii* (Pocock, 1889)
- *Odontobuthus bidentatus* Lourenço et Pézier, 2002
- *Orthochirus farzanpayi* (Vachon et Farzanpay, 1987)
- *Orthochirus iranensis* Kovařík, 2004
- *Orthochirus stockwelli* (Lourenço et Vachon, 1995)

Family **Razianidae** (Birula, 1903)

- **Androctonus crassicauda** (Olivier, 1807)
  Figures 4, 20, 25–28

**Systematics**

Family **Buthidae** C. L. Koch, 1837

- *Androctonus crassicauda* Olivier, 1807: 97.
- *Prionurus crassicauda*: Pocock, 1895: 292; Tullgren, 1909: 2; Birula, 1904: 29; Birula, 1905: 120; Masi, 1912: 91; Penther, 1912: 110.
- *Androctonus crassicauda crassicauda* (see Vignoli et al., 2003: 4).

**Type Locality and Type Repository.** Kashan, Persia, now Iran, Esfahan Province; MNHN.
Figures 2–3: Iran, Bushehr Province. 2. Tangestan, Ahram, 28°51'45"N 51°20'50"E, 123 m a.s.l. (Locality No. Bu-36). Recorded occurrence of Compsobuthus persicus sp. n., Hottentotta sauleyi (Simon, 1880), Mesobuthus eupeus phillipsii (Pocock, 1889), Orthochirus farzanpai (Vachon et Farzanpay, 1987), Razianus zarudnyi (Birula, 1903), and Hemiscorpius lepturus Peters, 1861. 3. Dayer road, village, 26°28'12"N 51°07'40"E, 405 m a.s.l. (Locality No. Bu-21). Recorded occurrence of Mesobuthus eupeus phillipsii (Pocock, 1889).
Vachon & Buthacus tadmorensis tadmorensis

Buthacus yotvatensis yotvatensis

Buthus

Buthacus macrocentrus

Androctonus

Habibzadeh.

25°35'51"E, 4 m a.s.l. (Locality No. Bu-27), XI.2007, 1♀ RRLS, leg. Masihipour, Hayader & Habibzadeh; Bushehr to Dayer road, Dero Ahmad village, 27°53'47"N 51°35'51"E, 4 m a.s.l. (Locality No. Bu-27), XI.2007, 2♂ RRLS


= Buthus (Buthus) tadmorensis: Birula, 1910: 172; Birula, 1917: 229.


= Buthus (Buthus) tadmorensis: Birula, 1910: 172; Birula, 1917: 229.

Compsobuthus jakesi Kovařík, 2003

Figures 19, 41–44


distribution: Iran, known from Bushehr Province (Kovařík, 2005: 8, as "Chamak Province") and Khoozestan Province (Navidpour et al., 2008: 7); Iraq (Penther, 1912: 112), Israel (Vachon, 1966: 210), Jordan (Pérez Minocci, 1974: 19), Syria (Simon, 1892: 84), Turkey (Crucitti & Vignoli, 2002: 439).
**Figure 4:** Map of Bushehr province showing distribution of *Androctonus crassicauda* and *Buthacus macrocentrus* collected in this study.

**Type Locality and Type Repository.** Iraq, Najaf Province, Ash-Shabakah (Shabachah, Shabicha), Geophysics Brno base camp, 150 km SW of An-Najaf (Najaf), 262 m a.s.l., 31°06′N 43°95′E; FKCP.