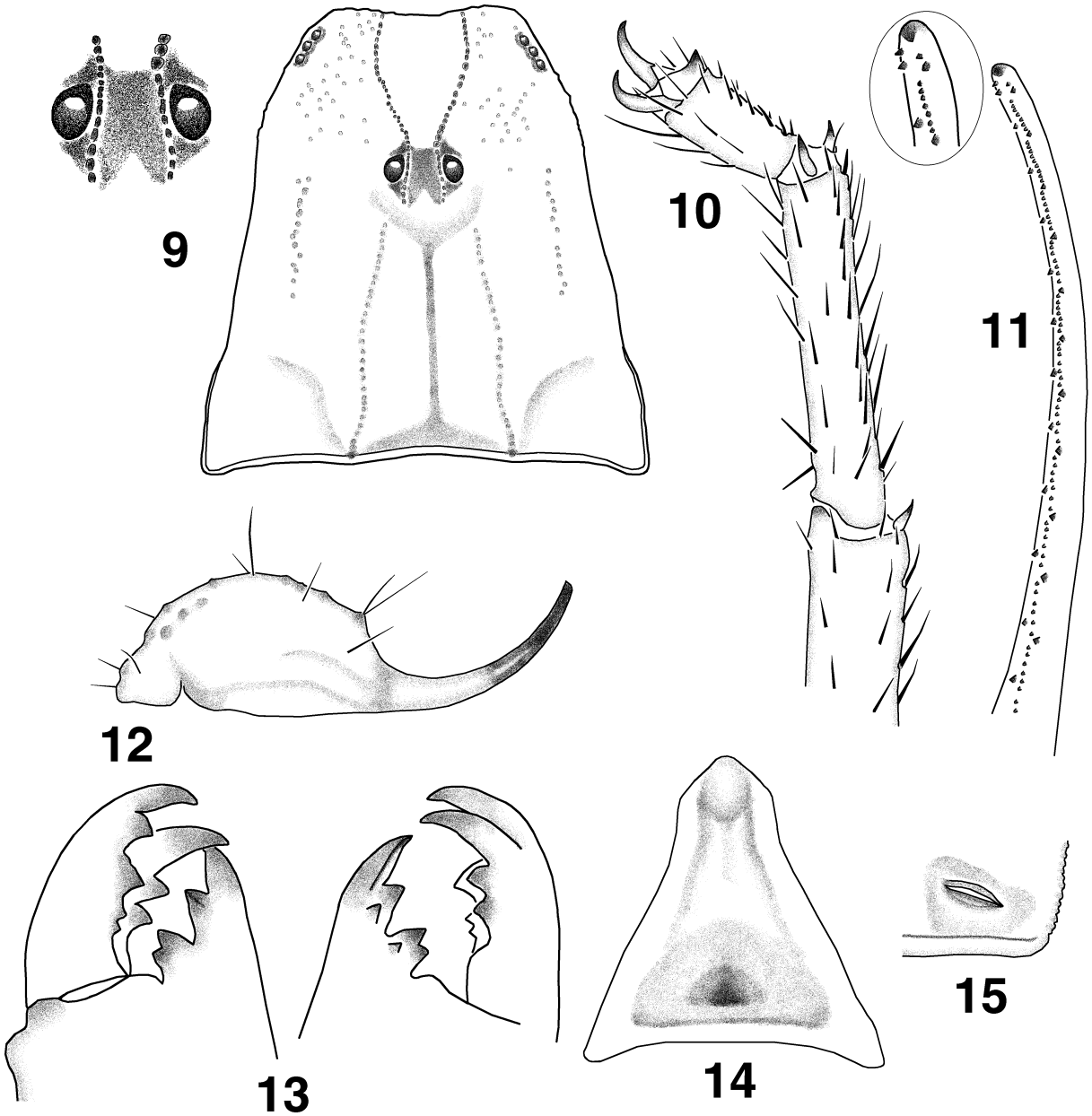
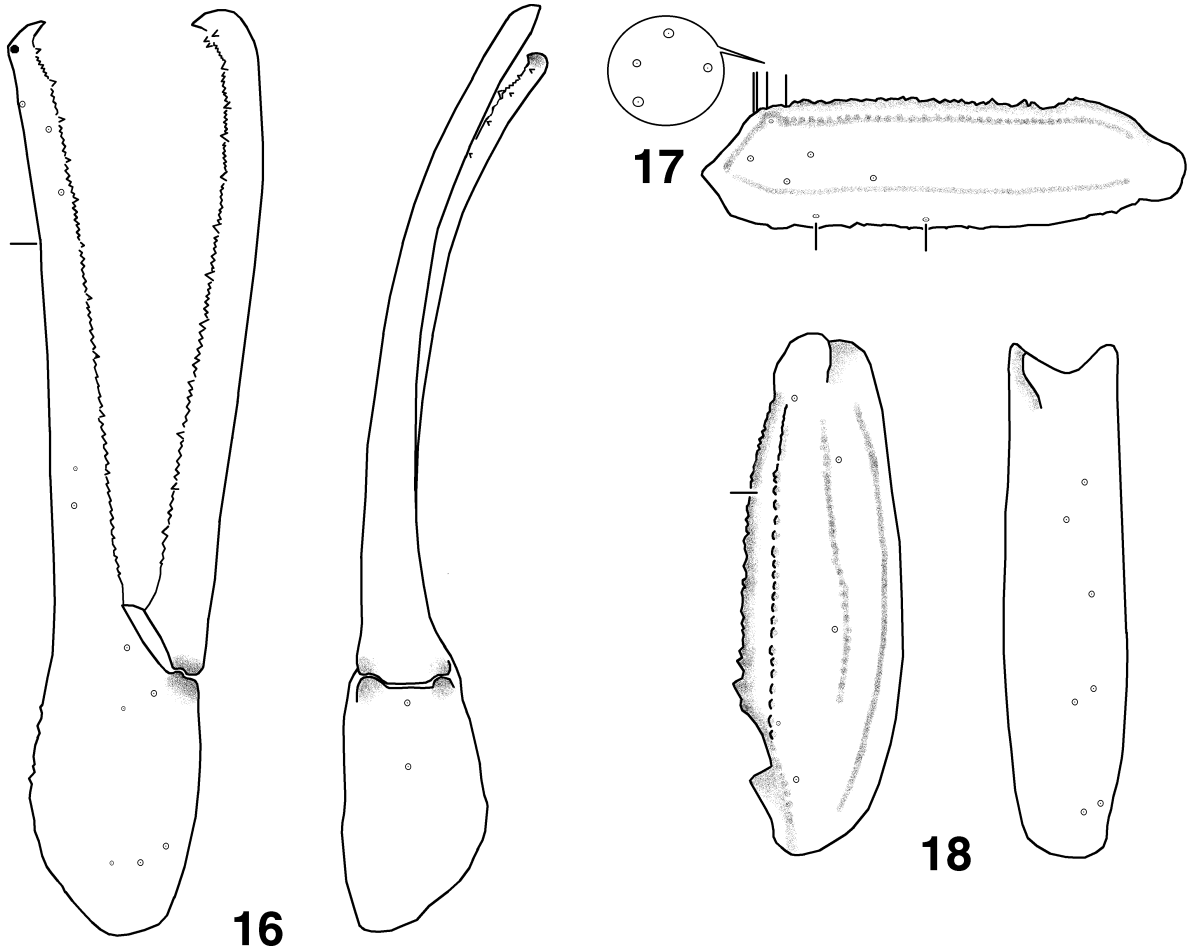


Figures 9–15: *Compsobuthus persicus*, **sp. nov.**, female paratype (BU-18). **9.** Carapace and closeup of median eyes showing well developed median ocular carinae. **10.** Right leg III showing basitarsus and tarsus. Note small tibial spur. **11**. Right chelal movable finger showing dentition, closeup of distal tip in ellipse. **12.** Telson, lateral view. **13.** Left chelicera, dorsal and ventral views. **14.** Sternum. **15.** Left stigmata 3.

2♂4♀(paratypes) RRLS 2♀(paratypes) FKCP, leg. Masihipour, Bahrani & Habibzadeh; Dailam road, Khite Amareh village, 30°42'52"N 49°44'59"E, 41 m a.s.l. (Locality No. OM-801), VII.2007, 1♂(paratype) RRLS, leg. Navidpour, Masihipour & Habibzadeh.

ETYMOLOGY. Named after the country of type locality.

DIAGNOSIS. Total length 28–37 mm. Movable finger of pedipalp bears 10 or 11 rows of granules, without external and with internal granules (the *acutecarinatus* group). Intermediate carinae of second metasomal segment may reach three-quarters of segment length or be confined to only its posterior half; third segment bears only 3–10 posteriorly situated granules in place of



Figures 16–18: *Compsobuthus persicus*, **sp. nov.**, female paratype (BU-18), showing trichobothrial pattern. **16.** Chela external and ventral views. Closed circle on chelal fixed finger external view indicates trichobthrium *i*. **17.** Femur, dorsal view. Circled area shows internal trichobothria from an internal perspective. **18.** Patella, dorsal and external views.

intermediate carinae. All segments of pedipalps long and narrow in both sexes. Telson elongate. Pectinal teeth number 21–24.

DESCRIPTION: The adults are 28 mm (male) to 37 mm (female) long. Measurements of the carapace, telson, segments of the metasoma and segments of the pedipalps, and numbers of pectinal teeth are given in Table 1. Sexual dimorphism is minor, but adult males do not have fingers of pedipalps proximally curved; there is no difference in length and width of pedipalps and metasomal segments.

COLORATION: The base color is uniformly yellow to yellowish brown.

MESOSOMA: Carapace (Fig. 9) surface rough with minute granules visible at 10x, larger granules occuring near lateral eyes; median ocular carinae well developed and conspicuous on median eye tubercle; central lateral and joined central-posterior median carinae of medium development. Tergites I–VI bear very strong, denticulate lateral carinae. Each carina terminates in a spiniform process that extends well past the posterior margin of the tergite. Tergite VII is pentacarinate, with lateral pairs strong, serratocrenulate and the median carina moderate, crenulate and present only in the proximal half. The pectinal tooth count is 21–24 in the females and 23–24 in the males. The seventh segment bears four ventral crenulate carinae. The other sternites are smooth or shagreened and bear two or four smooth carinae. Stigma (Fig. 15) medium to long in length and slit-like in shape. Sternum (Fig. 14) Type 1, exhibiting considerable horizontal compression; concave region much larger than posterior depression, extending towards the apex; outer ridge narrow posteriorly, widening laterally towards the apex; apical "button" weakly developed. Sternum as long as wide, apex lateral edge quite short, approximately one quarter the sternum's length.

CHELICERAE (Fig. 13): Movable finger dorsal edge with one large subdistal (*sd*) denticle; two small but well

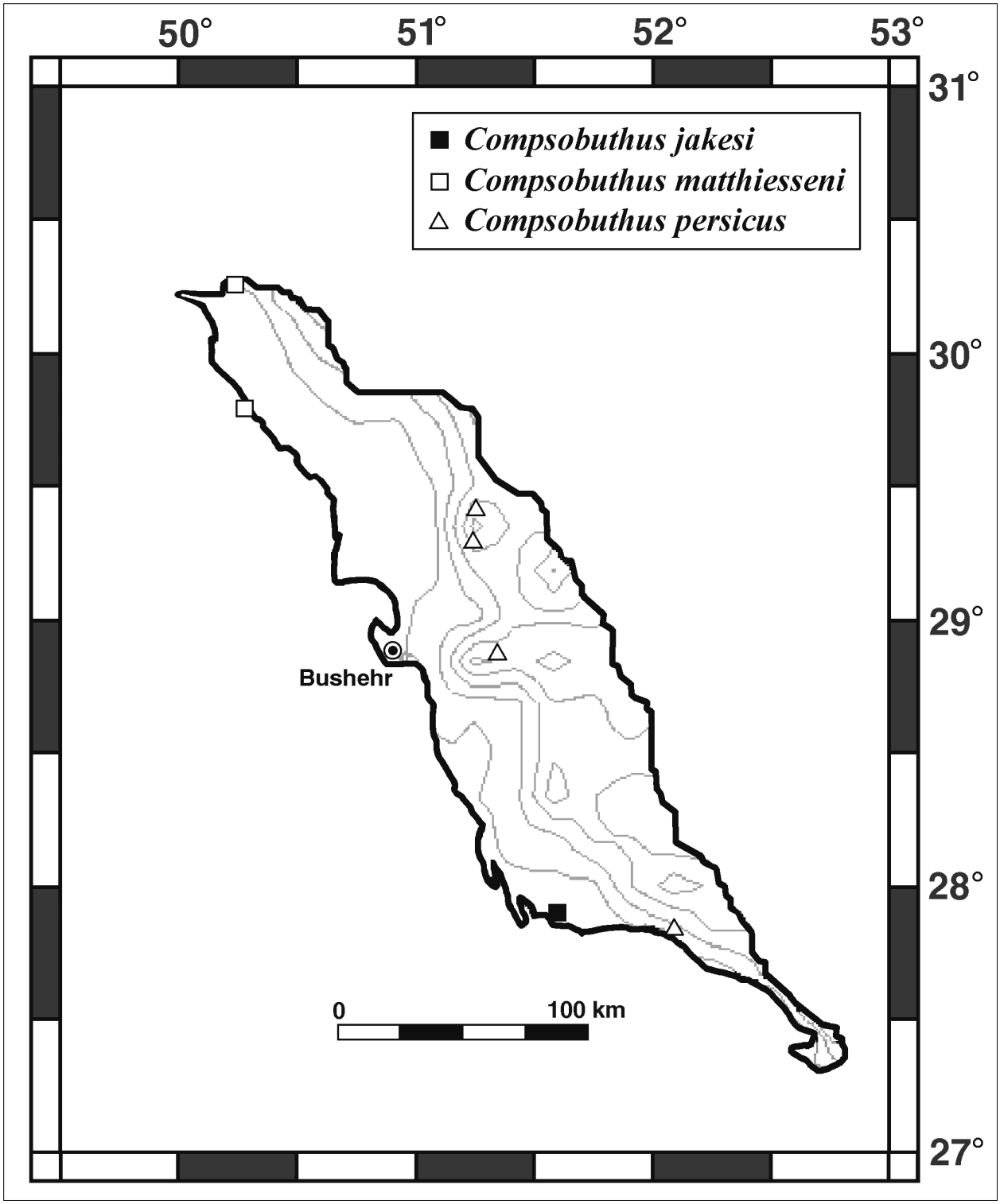


Figure 19: Map of Bushehr province showing distribution of *Compsobuthus jakesi*, *C. matthiesseni* and *C. persicus* **sp. nov.** collected in this study.

developed subbasal (*sb*) denticles; ventral edge with two well developed ventral accessory (*va*) denticles. Ventral distal denticle (*vd*) shorter in length than dorsal (*dd*) counterpart. Ventral surface of fixed finger base with two pigmented *va* denticles.

METASOMA AND TELSON: The first segment has a total of 10 carinae, the second through fourth segments have eight complete carinae, and the fifth segment has five carinae. The lateral carinae of the second segment, a partial tenth carinal pair, may reach three-quarters of the segment length or be confined to only its posterior half; all segments are sparsely setose and granulated; larger granules are usually on the ventral surface of segment V, parallel to the ventromedian carina. The telson (Fig. 12) is elongate, with the aculeus approximately as long as the vesicle. The ventral surface of the telson is smooth and a very small, with a smooth subaculear tubercle and a median row composed of several minute granules.

PEDIPALPS (Figs. 11, 16–18): The femur has four granulose to crenulate carinae and the patella has seven only partly crenulate carinae. The chela is smooth, without discernible carinae. All segments are long and narrow, especially the femur and fingers. The movable finger (Fig. 11) bears 10 or 11 rows of granules, without external and with internal granules. The eleventh row may have one external granule. Trichobothrial pattern (Figs. 16–18) orthobothriotaxic, Type A, femoral dorsal trichobothria in *beta* pattern, d_2 located on dorsal surface; patellar trichobothrium d_3 positioned dorsal of dorso-median carina (DM_c) (i.e., member of "buthus" group).

LEGS (Fig. 10): Both pedal spurs present, tibial spur present on legs III–IV, spur on leg III smaller. Tarsus with delicate setae on ventral surface.

AFFINITIES. The described features distinguish *C. persicus* **sp. n.** from all other species of the genus (see the key to species known to occur in Bushehr province). *C. persicus* **sp. n.** is closest to *C. sobotniki* Kovařík, 2003 from Hormozgan Province, from which it differs in proportions. *C. persicus* **sp. n.** has more elongate telson and longer and narrower segments of pedipaps. The femur length to width ratio is 3.1 in *C. sobotniki* and 3.8–4.0 in *C. persicus* sp. n. The chela length to width ratio is 5.6 in *C. sobotniki* and 6.0–6.6 in *C. persicus* **sp. n.** The chela to movable finger length ratio is 1.54 in *C. sobotniki* and 1.37–1.40 in *C. persicus* **sp. n.** *C. sobotniki* has all metasomal segments smooth, whereas they are usually granulated in *C. persicus* **sp. n.**

Hottentotta saulcyi (Simon, 1880)
Figures 2, 22, 29–32

Buthus saulcyi Simon, 1880a: 378; Simon, 1880b: 29; Kraepelin, 1899: 18; Kraepelin, 1901: 267; Weidner, 1959: 99.
Buthus (*Hottentotta*) *saulcyi*: Birula, 1905a: 136; Birula, 1917: 214; Birula, 1918: 30; Vachon, 1940b: 255.
Buthotus saulcyi: Vachon, 1949: 147 (1952: 233); Vachon, 1959: 134; Pringle, 1960: 79; Khalaf, 1962: 2; Khalaf, 1963: 64; Vachon, 1966: 210; Vachon & Stockmann, 1968: 91; Habibi, 1971: 43; Pérez Minocci, 1974: 21; Farzanpay, 1987: 148; Farzanpay, 1988: 37; El-Hennawy, 1992: 118; Kovařík, 1992: 90; Kovařík, 1992: 183; Akbari, 2007: 76; Akbari et al., 1997: 112; Dupré, Lambert & Gérard, 1998: 70.
Hottentotta saulcyi: Kovařík, 1997a: 40; Crucitti & Vignoli, 2002: 446; Vignoli et al., 2003: 4; Karatas, 2003: 315; Kovařík, 2007: 61; Navidpour et al., 2008: 10.
Hottentotta (*Hottentotta*) *saulcyi*: Kovařík, 1998: 110; Fet & Lowe, 2000: 143.
Buthus hottentotta: Kraepelin, 1891: 185 (in part).

TYPE LOCALITY AND TYPE REPOSITORY. Iraq, Mosul; MNHN, ZMUH.

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., Tangestan, Ahram, 28°51'45"N 51°20'50"E, 123 m a.s.l. (Locality No. Bu-36), XI.2007, 2♂ RRLS, 1im. FKCP, leg. Masihipour, Bahrani & Habibzadeh.

DISTRIBUTION: Iran, known from Kermanshah (formerly Bachtaran), Fars, Hamadan, Hormozgan, Ilam, and Lorestan Provinces (Kovařík, 2007: 65), Bushehr and Khoozestan Provinces (Akbari et al., 1997: 112; Akbari, 2007: 76; Navidpour et al., 2008: 9); Afghanistan (Kovařík, 1997a: 40), Iraq (Simon, 1880a: 379), Turkey (Crucitti & Vignoli, 2002: 446). Record for Syria (Kinzelbach, 1985; El-Hennawy, 1992: 118) must be considered dubious.

Mesobuthus eupeus phillipsii (Pocock, 1889)
Figures 2–3, 5, 21, 22, 49–52

Buthus phillipsii Pocock, 1889: 341; Weidner, 1959: 99.
Buthus phillipsi: Kraepelin, 1899: 24; Birula, 1905a: 131; Borelli, 1915: 460; Werner, 1916: 80; Lampe, 1918: 191.
Mesobuthus phillipsi: Vachon, 1950: 153 (1952: 325); Pérez Minocci, 1974: 25.
Buthus (*Buthus*) *eupeus phillipsi*: Birula, 1917: 228.
Mesobuthus eupeus phillipsi: Vachon, 1959: 148; Vachon, 1966: 213; Habibi, 1971: 44; Farzanpay, 1986: 334; Fet, 1994: 527; Kovařík, 1997a: 49; Kovařík, 1998: 114; Fet & Lowe, 2000: 175.
Mesobuthus eupeus phillipsii: Farzanpay, 1987: 150; Farzanpay, 1988: 38; Navidpour et al., 2008: 11.
Mesobuthus eupeus: Akbari, 2007: 76.
Buthus hottentotta: Kraepelin, 1891: 185 (part?).

TYPE LOCALITY AND TYPE REPOSITORY. Iran, Bushir (now Bushehr) Province; BMNH.

Figures 20–21: Iran, Bushehr Province. **20.** Delvar, 28°42'59"N 51°04'52"E, 4 m a.s.l. (Locality No. Bu-20). Recorded occurence of *Androctonus crassicauda* (Olivier, 1807), *Buthacus macrocentrus* (Ehrenberg, 1828), *Orthochirus iranus* Kovařík, 2004, and *Scorpio maurus townsendi* (Pocock, 1900). **21.** Tangestan, 28°52'53"N 51°18'43", 95 m a.s.l. (Locality No. Bu-35). Recorded occurrence of *Mesobuthus eupeus phillipsii* (Pocock, 1889), *Odontobuthus bidentatus* Lourenço et Pézier, 2002, and *Scorpio maurus townsendi* (Pocock, 1900).

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., 15 km NW Bandar-e Genaveh, 50 m a.s.l., Chahak village env., 3–5.V.1996, 4♂1juv. FKCP, leg. M. Kaftan & V. Šejna; Dayer road, Menjoo village, 28°28'12"N 51°07'40"E, 405 m a.s.l. (Locality No. Bu-21), XI.2007, 1♂3♀ RRLS 1im. FKCP, leg. Masihipour, Bahrani & Hayader; Dayer, 27°49'35"N 52°04'44"E, 4 m a.s.l. (Locality No. Bu-25), XI.2007, 1♀ RRLS, leg. Masihipour & Habibzadeh; Khormuj, 28°41'46"N 51°21'49"E, 83 m a.s.l. (Locality No. Bu-31), XI.2007, 1♂1♀ FKCP, leg. Masihipour & Habibzadeh; Tangestan, 28°52'53"N 51°18'43", 95 m a.s.l. (Locality No. Bu-35), XI.2007, 2♂2♀3juvs. RRLS, leg. Masihipour, Bahrani & Habibzadeh; Tangestan, Ahram, 28°51'45"N 51°20'50"E, 123 m a.s.l. (Locality No. Bu-36), XI.2007, 1juv. RRLS, leg. Masihipour, Bahrani & Habibzadeh; Borazjan, Dalaki, 29°23'27"N 51°16'00"E, 100 m a.s.l. (Locality No. Bu-19), XI.2007, 3♂2♀1juv., RRLS, leg. Masihipour & Bahrani; Dailam road, 85 m a.s.l. (Locality No. OM-D 804), VI.2007, 2♀ FKCP, 6♂8♀10ims. RRLS, leg. Navidpour, Masihipour & Tofigh; Omidiyeh to Genaveh road, 30°13'42"N 50°12'01"E, 128 m a.s.l. (Locality No. B-Bi805), VI.2007, 8♂1♀11juvs. RRLS, leg. Navidpour & Masihipour; Borazjan, 29°16'56"N 51°15'26"E, 200 m a.s.l. (Locality No. Bu-18), II.2007, 12♀9♂ RRLS, leg. Masihipour, Bahrani & Habibzadeh; Borazjan, 29°16'56"N 51°15'26"E, 200 m a.s.l. (Locality No. Bu-18.2), II.2007, 4juvs. FKCP, 8♂10♀11juvs. RRLS, leg. Masihipour, Bahrani & Habibzadeh; Genaveh, 29°48'42″N 50°14'22″E, 227 m a.s.l. (Locality No. Bu-G1), I.2005, 2♀ FKCP, 8♂2♀ RRLS, leg. Hayader & Tofigh; Bushehr (Locality No. Bu-319.1) II.2007, 1♀2ims. FKCP, 11♀6♂ RRLS, leg. Bahrani & Hayader; Behbahan–Genaveh road, 29°40.71'N 51°24.04'E, 16 m a.s.l. (Locality. No. B-G803), VII.2007, 14 specimens RRLS, 1♀2♂ FKCP, leg. Navidpour & Masihipour.

DISTRIBUTION: Iran (Bushehr and Khoozestan Provinces), Iraq (Vachon, 1966: 213; Habibi, 1971: 44; Fet & Lowe, 2000: 175; Navidpour et al., 2008: 11).

Odontobuthus bidentatus Lourenço et Pézier, 2002
Figures 8, 21, 22, 33–36

Odontobuthus odonturus: Habibi, 1971: 44 (in part); Farzanpay, 1987: 155; Farzanpay, 1988: 39; Kovařík, 1997a: 47; Kovařík, 1998: 115 (in part); Fet & Lowe, 2000: 188 (in part); Akbari, 2007: 76.

Odontobuthus bidentatus Lourenço & Pézier, 2002: 118; Navidpour et al., 2008: 13.

TYPE LOCALITY AND TYPE REPOSITORY. Iraq, 180 km north of Baghdad, Khanagin–Dyala; MHNG.

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., 15 km NW of Bandar-e Genaveh, Chahak vill. env., 50 m a.s.l., 3–5.V.1996, 1♂2♀ FKCP, leg. M. Kaftan & D. Král; cca 17 km NW. Bandar-e Genaveh, 29°38'32"N 50°26'56"E, 10 m a.s.l., 2♀ FKCP, 13–14.X.1998, leg. P. Kabátek; Bushehr to Dayer road, Jeirani village, 27°50'47"N 51°45'33"E (Locality No. Bu-22), XI.2007, 19♂15♀6juvs. RRLS, 1♀ FKCP, leg. Masihipour, Bahrani & Habibzadeh; Kangan, 27°42'00"N 52°04'44"E, 4 m a.s.l. (Locality No. Bu-25), XI.2007, 1juv. RRLS, leg. Masihipour, Bahrani & 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♂3♀2juvs., RRLS, leg. Masihipour, Hayader & Habibzadeh; Ahram, Khormuj road, 28°45'43"N 51°17'51"E, 43 m a.s.l. (Locality No. Bu-30), XI.2007, 5♂2♀ RRLS, 1♀ FKCP, leg. Masihpour, Bahrani & Hayader; Khormuj, 28°41'46"N 51°21'49"E, 83 m a.s.l. (Locality No. Bu-31), XI.2007, 3♀ RRLS, leg. Masihipour & Habibzadeh; Tangestan, Farshanbeh, 28°52'53"N 51°18'43"E, 95 m a.s.l. (Locality No. Bu-35), XI.2007, 2♂3♀2juvs. RRLS, 1♂2juvs. FKCP, leg. Masihipour, Bahrani & Habibzadeh; Omidiyeh to Genaveh road, 30°13'42"N 50°12'01"E, 128 m a.s.l. (Locality No. B-Bi805), VI.2007, 1♀1juv. FKCP, leg. Navidpour & Masihipour; Dailam road, 85 m a.s.l. (Locality No. OM-D 804), VI.2007, 6♂8♀10ims. RRLS, leg. Navidpour, Masihipour & Tofigh; Genaveh, 29°48'42"N 50°14' 22"E, 227 m a.s.l. (Locality No. Bu-G), I.2005, 8♂2♀, RRLS, leg. Hayader & Tofigh.

DISTRIBUTION: Iran, Bushehr Province (Lourenço & Pézier, 2002: 118), Khoozestan Province (Navidpour et al., 2008: 13); Iraq (Lourenço & Pézier, 2002: 118).

Orthochirus farzanpayi (Vachon et Farzanpay, 1987)
Figures 2, 23, 61–64

Simonoides farzanpayi Vachon & Farzanpay in Farzanpay, 1987: 162; Farzanpay, 1988: 41; Fet & Lowe, 2000: 223.

Orthochirus farzanpayi Kovařík & Fet, 2006: 1; Navidpour et al., 2008: 14.

= *Orthochirus sobotniki* Kovařík, 2004: 20 (syn. by Kovařík & Fet, 2006: 1).

TYPE LOCALITY AND TYPE REPOSITORY. Iran, 215 km N of Bandar-e-Abbas; NHMW.

TYPE MATERIAL EXAMINED. **Iran**, 215 km N of Bandar-e-Abbas, 22.III.1972, 1♀ (lectotype) 1♂1♀ (paralectotypes), NHMW Nos. 68–70, rev. Max Vachon in 1977, No. VA 1910; 5 km SE of Posht Chenar, 19–20 April 2000, 29°12.941'N 53°20.014'E, 1692 m a.s.l.,

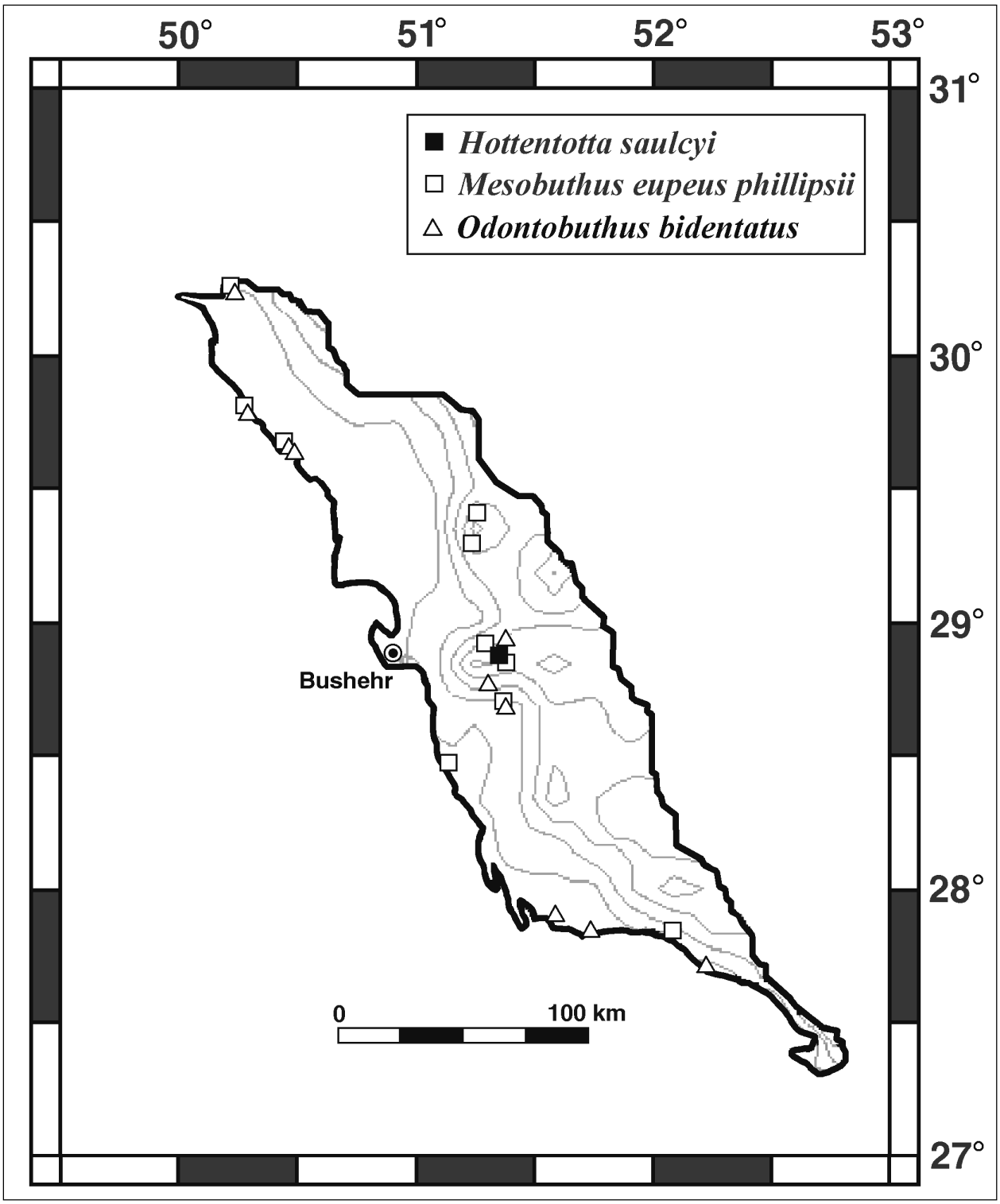


Figure 22: Map of Bushehr province showing distribution of *Hottentotta saulcyi*, *Mesobuthus eupeus phillipsii* and *Odontobuthus bidentatus* collected in this study.

1♂1♀1im. ♂ (holotype, allotype, and paratype of *Orthochirus sobotniki*), leg. J. Šobotník, FKCP.

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., Borazjan, 29°16'56"N 51°15'26"E, 200 m a.s.l. (Locality No. Bu-18), II.2007, 1♀ RRLS, leg. Masihipour, Bahrani & Habibzadeh; Borazjan, Dalaki, 29°23'27"N 51°16'00"E, 100 m a.s.l. (Locality No. Bu-19), XI.2007, 1♀ RRLS, leg. Masihipour & Bahrani; Dayer, 27°49'35"N 52°04'44"E, 4 m a.s.l. (Locality No.

Bu-25), XI.2007, 1♂ RRLS, leg. Masihipour, Bahrani & Habibzadeh; Dayer road, 27°55'44"N 51°49'56"E, 8 m a.s.l. (Locality No. Bu-26), XI.2007, 1♂ FKCP, 1♀ RRLS, leg. Masihiour, Bahrani & Habibzadeh; Tangestan, Ahram, 28°51'45"N 51°20'50"E, 123 m a.s.l. (Locality No. Bu-36), XI.2007, 2♀ FKCP, 1♂ RRLS, leg. Masihipour, Bahrani & Habibzadeh.

COMMENTS: All types and examined specimens of *Orthochirus farzanpayi* from Khoozestan Province (Shushtar district, Arab Hasan village) lack trichobothrium d_2 on the dorsal surface of pedipalp femur. Most of specimens from the Bushehr Province have this trichobothrium present, only one male from locality No. 36 lacks it.

DISTRIBUTION: Iran: Hormozgan and Fars Provinces (Kovařík & Fet, 2006: 1–3), Khoozestan Province (Navidpour et al., 2008: 15), Bushehr Province (first report).

Orthochirus iranus Kovařík, 2004
Figures 8, 23, 65–68

Orthochirus sp. n.?: Kovařík, 1997a: 47 (in part).
Orthochirus iranus Kovařík, 2004: 13; Kovařík & Fet, 2006: 8; Navidpour et al., 2008: 15.

TYPE LOCALITY AND TYPE REPOSITORY. **Iran**, Bushehr Province, cca 17 km NW. Bandar-e Gonárer, 29°38'32"N 50°26'56"E, 10 m a.s.l.; FKCP.

TYPE MATERIAL EXAMINED. **Iran**, Bushehr Province, cca 17 km NW Bandar-e Gonarer (correct: Bandar-e Genaveh), 29°38'32"N 50°26'56"E, 10 m a.s.l.,3♂2♀ (holotype and paratypes), 13–14.X.1998, leg. P. Kabátek; Chahak, 15 km NW Bandar-e Genaveh by road, 29°40'N, 50°25'E, 20 m a.s.l., 3–5.V.1996 (Locality No. 19 in Frynta et al., 1997: 4), 1♀ (allotype), leg. D. Král, 1♂1♀ (paratypes), leg. M. Kaftan; Khoozestan Province, Chogha Zanbil (zikkurat), 32°00'N, 48°31'E, 100 m a.s.l., 5–6.V.1996 (Locality No. 20 in Frynta et al., 1997: 4), 1im.♂ (paratype), leg. M. Kaftan. All types are in FKCP.

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., Delvar, 28°42'59"N 51°04'52"E, 4 m a.s.l. (Locality No. Bu-20), XI.2007, 2♂ FKCP, 3♂1♀ RRLS, leg. Masihipour & Hayader; Khormuj, 28°41' 46"N 51°21'49"E, 83 m a.s.l. (Locality No. Bu-31), XI.2007, 1♂1juv., RRLS, leg. Masihipour & Habibzadeh; Omidiyeh–Dailam road (border line of Khoozestan and Bushehr), 30°18'48"N 50°12'01"E, 130 m a.s.l. (Locality No. B805), VI.2007, 1♂ RRLS, leg. Masihipour & Hayader.

COMMENTS: All type specimens of *Orthochirus iranus* from Bushehr Province lack trichobothrium d_2 on the dorsal surface of pedipalp femur. Some specimens from Khoozestan Province have this trichobothrium fully developed, some have it reduced, and some lack it. The variability of trichobothrium d_2 was first discussed by Navidpour et al. (2008: 17–20). In the past, all known specimens from Bushehr Province were found to lack this trichobothrium; however, some of the most recently examined specimens (from localities Nos. Bu-31 and B805) have trichobothrium d_2 fully developed.

DISTRIBUTION: Iran, Bushehr and Khoozestan Provinces (Kovařík, 2004: 13), Lorestan and Hamadan Provinces (Navidpour et al., 2008: 20).

Orthochirus stockwelli (Lourenço et Vachon, 1995)
Figures 6, 23, 69–72

Paraorthochirus stockwelli Lourenço & Vachon, 1995: 299; Lourenço & Vachon, 1997: 329; Kovařík, 1997a: 50; Kovařík, 1998: 117; Fet & Lowe, 2000: 212; ?Kovařík & Fet, 2006: 9.
Orthochirus stockwelli: Navidpour et al., 2008: 20.

TYPE LOCALITY AND TYPE REPOSITORY. Iran, Hormozgan Province, Bandar-Abbas; MNHN.

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., Dailam to Genaveh road, Payshur village, 29°41'56"N 50°26'04"E, 18 m a.s.l. (Locality No. Bu-803), VII.2007, 1♂ RRLS, leg. Masihipour, Hayader & Habibzadeh; Behbahan–Genaveh road, 29°40'43"N 50°24'24"E, 17 m a.s.l. (Locality No. B-G803), VII.2007, 1♀ FKCP, leg. Navidpour & Masihipour.

DISTRIBUTION: Iran, Hormozgan Province (Lourenço & Vachon, 1995: 299), Khoozestan Province (Navidpour et al., 2008: 20), and Bushehr Province (first report).

Razianus zarudnyi (Birula, 1903)
Figures 2, 5, 23, 57–60

Hemibuthus zarudnyi Birula, 1903: 75; Roewer, 1943: 216; Vachon, 1966: 211.
Razianus zarudnyi: Farzanpay, 1987: 159; Farzanpay, 1988: 41; Fet & Lowe, 2000: 216; Akbari, 2007: 76; Navidpour et al., 2008: 20.
= *Buthus zarudnianus* Birula, 1905a: 144; Birula, 1905b: 450; Kraepelin, 1913: 127; Vachon, 1966: 211; Habibi, 1971: 43 (syn. by Fet, 1997: 66).
= *Neohemibuthus kinzelbachi* Lourenço, 1996: 94; Kovařík, 1997a: 49 (syn. by Fet, 1997: 66).
Neohemibuthus zarudnyi: Fet, 1997: 65; Kovařík, 1998: 115.

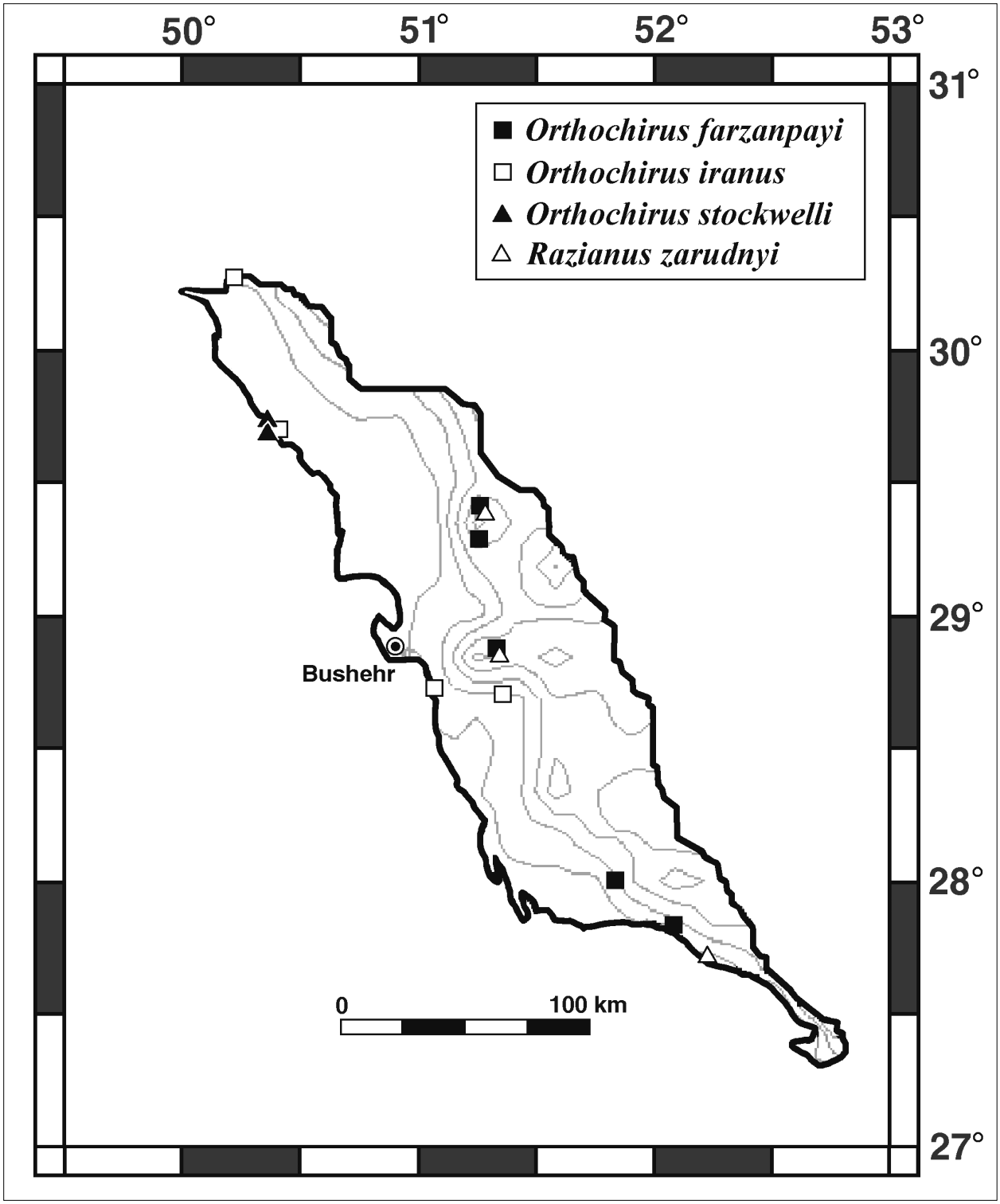


Figure 23: Map of Bushehr province showing distribution of *Orthochirus farzanpayi*, *O. iranus*, *O. stockwelli* and *Razianus zarudnyi* collected in this study.

TYPE LOCALITY AND TYPE REPOSITORY. "Persia, Kalagan Prov., Beludjistan, and Geh Prov., Makran", now Sistan & Baluchistan Prov., Iran (Fet, 1997); ZISP.

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., Kangan, 27°42'00"N 52°13'44"E, 5 m a.s.l. (Locality No. Bu-25), XI.2007, 1♂2♀ RRLS, leg.

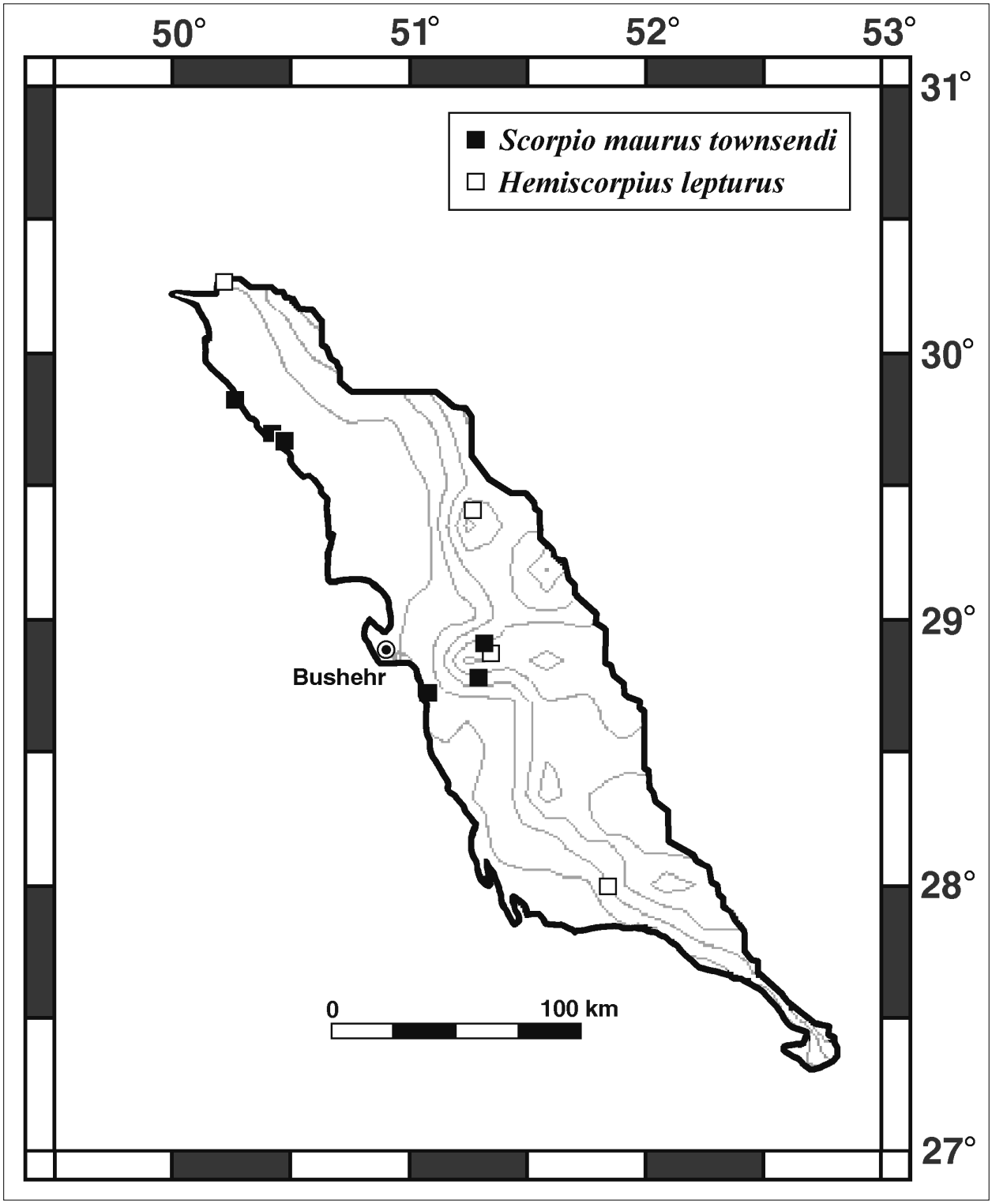


Figure 24: Map of Bushehr province showing distribution of *Scorpio maurus townsendi* and *Hemiscorpius lepturus* collected in this study.

Masihipour & Bahrani; Tangestan, Ahram, 28°51'45"N 51°20'50"E, 123 m a.s.l. (Locality No. Bu-36), XI.2007, 1♀ RRLS 2♀ FKCP, leg. Masihipour, Bahrani & Habibzadeh; Borazjan, Dalaki, 29°23'27"N 51°16'00"E,

100 m a.s.l. (Locality No. Bu-19), XI.2007, 1♀ RRLS, leg. Masihipour & Bahrani.

DISTRIBUTION: Iran, Bushehr Province (Akbari, 2007: 76), Chahar Mahal & Bakhtiyari Province (Fet, 1997: 67), Fars Province (Fet, 1997: 68), Khoozestan Province (Lourenço, 1996: 94; Fet, 1997: 67–68; Navidpour et al., 2008: 20), and Sistan & Baluchistan Province (Fet, 1997: 66).

Family **Scorpionidae** Latreille, 1802

Scorpio maurus townsendi (Pocock, 1900)
Figures 20–21, 24, 73–77

Heterometrus townsendi Pocock, 1900: 364.

? *Scorpio townsendi*: Birula, 1905a: 147 (Birula, 1910: 184).

Scorpio maurus townsendi: Birula, 1910: 184; Birula, 1917: 231; Vachon, 1950: 164 (1952: 336); Vachon, 1966: 215; Habibi, 1971: 44; Pérez Minocci, 1974: 40; Kovařík, 1997a: 50; Kovařík, 1998: 141; Fet, 2000: 479; Navidpour et al., 2008: 26.

Scorpio maurus: Farzanpay, 1987: 165; Farzanpay, 1988: 42; Akbari, 2007: 76.

TYPE LOCALITY AND TYPE REPOSITORY. Iran, Bushehr Province, Fort Reshire near Bushire, Persian Gulf, Iran; BMNH.

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., cca 17 km NW. Bandar-e Genaveh, 10 m a.s.l., 29°38'32"N 50°26'56"E, 2♀10juvs. FKCP, 13–14.X.1998, leg. P. Kabátek; Bushehr env. (Locality No. Bu-1), I.2005, 1♀ FKCP, 1♀ RRLS, leg. Jahanifard; Genaveh env. (Locality No. Bu-2), 2005, 1♀ FKCP, 2♂8♀ RRLS, leg. Bahrani & Tofigh; Delvar, 28°42' 59"N 51°04'52"E, 4 m a.s.l. (Locality No. Bu-20), XI.2007, 10 juvs. RRLS, 1♀2juvs. FKCP, leg. Masihipour & Hayader; Ahram, Khormuj road, 28°45'43"N 51°17'51"E, 43 m a.s.l. (Locality No. Bu-30), XI.2007, 1♂ RRLS, leg. Masihipour, Bharani & Hayader; Tangestan, Farshanbeh, 28º52'53"N 51°18' 43"E, 95 m a.s.l. (Locality No. Bu-35), XI.2007, 2♀22juvs. RRLS, 7juvs. FKCP, leg. Masihipour, Bahrani & Habibzadeh.

DISTRIBUTION: Iran, Bushehr Province (Pocock, 1900: 364), Khoozestan Province (Navidpour et al., 2008: 26).

Family **Hemiscorpiidae** Pocock, 1893

Hemiscorpius lepturus Peters, 1861
Figures 2, 5, 7, 24, 78–81

Hemiscorpius lepturus Peters, 1861a: 426; Karsch, 1879: 15, 21; Birula, 1905a: 146; Birula, 1917: 215; Birula, 1918: 42; Weidner, 1959: 100; Pringle, 1960: 84; Khalaf, 1962: 2; Khalaf, 1963: 68; Vachon, 1966: 214; Habibi, 1971: 44; Farzanpay & Pretzmann, 1974: 217; Pérez Minocci, 1974: 36; Vachon, 1977: 213; Vachon, 1979: 59; Farzanpay, 1987: 141, 168; Farzanpay, 1988: 42; Simard & Watt, 1990: 441; Sissom, 1990: 75; El-Hennawy, 1992: 135; Kovařík, 1997a: 48; Kovařík, 1998: 136; Fet, 2000: 429; Prendini, 2000: 44; Capes & Fet, 2001: 303; Monod & Lourenço, 2005: 902; Akbari, 2007: 76; Navidpour et al., 2008: 26.

Hemiscorpion lepturus: Peters, 1861b: 511; Ausserer, 1880: 466; Kraepelin, 1899: 142; Werner, 1934: 276; Moritz & Fischer, 1980: 317; Kovařík, 2002: 14.

Hemiscorpio lepturus: Simon, 1880b: 29.

TYPE LOCALITY AND TYPE REPOSITORY. Iraq, "Mendeli bei Baghdad" (Mendeli near Baghdad); ZMHB.

TYPE MATERIAL EXAMINED. Iraq, Mendeli bei Baghdad, 2♂2♀ (syntypes), leg. Petermann, ZMHB 43a–d.

BUSHEHR PROVINCE MATERIAL EXAMINED. **Iran**, Bushehr Prov., Dayer road, 27°59'44"N 51°49'56"E, 8 m a.s.l. (Locality No. Bu-26), XI.2007, 1♀ RRLS, leg. Masihipour, Bahrani & Habibzadeh; Tangestan, Ahram, 28°51'54"N 51°20'50"E, 123 m a.s.l. (Locality No. Bu-36), XI.2007, 1♂ RRLS, leg. Masihipour, Bahrani & Habibzadeh; Tangestan to Farashband, 227 m a.s.l. (Locality No. Bu-37), XI.2007, 1♂ RRLS, 1♂2♀ FKCP, leg. Masihipour, Bahrani & Hayder; Borazjan, Dalaki, 29°23'27"N 51°16'00"E, 100 m a.s.l. (Locality No. Bu-19), XI.2007, 2♀ RRLS, leg. Masihpour & Bahrani; Omidiyeh to Genaveh road, 30°13'42"N 50°12'01"E, 128 m a.s.l. (Locality No. B-Bi805), VI.2007, 3♂4♀ RRLS, leg. Navidpour & Masihipour.

DISTRIBUTION: Iran, Kohkiloyeh & Boyerahmad, Fars, Hormozgan, and Lorestan Provinces (Kovařík, 1997a: 48), Bushehr and Khoozestan Provinces (Farzanpay, 1987: 141, Monod & Lourenço, 2005: 902; Akbari, 2007: 76; Navidpour et al., 2008: 26); Iraq (Peters, 1861a: 426).

Key of Scorpions of Bushehr Province

1. Pedipalp patella without ventral trichobothria ……. **Buthidae** .....……..... 3
- Pedipalp patella with ventral trichobothria ..……..... 2

2. Lateroapical margins of leg tarsi shaped into rounded lobes. …….. ***Scorpio maurus townsendi*** (Pocock, 1900)
- Lateroapical margins of leg tarsi straight. ..... …… ***Hemiscorpius lepturus*** Peters, 1861

3. Carapace in lateral view distinctly inclined downward from median eyes to anterior margin. Total length less than 50 mm. .... ***Orthochirus***.....……..... 4
- Carapace in lateral view with entire dorsal surface horizontal or nearly so (possibly with a slight anterior slope) .....…..... 6

4. Metasoma densely hirsute. ...……..... …...***Orthochirus stockwelli*** (Lourenço & Vachon, 1995)
- Entire metasoma glabrous (short, thin setae may issue from some punctae) .....……..... 5

5. Dorsal surface of fifth metasomal segment mesially densely granulated..... ***Orthochirus iranus*** Kovařík, 2004
- Dorsal surface of fifth metasomal segment mesially smooth. …….. ***Orthochirus farzanpayi*** (Vachon & Farzanpay, 1987)

6. Cheliceral fixed finger with a single ventral denticle ……...***Razianus zarudnyi*** (Birula, 1903)
- Cheliceral fixed finger with two ventral denticles .....……..... 7

7. Carapace granulated but without carinae ..... …….***Buthacus macrocentrus*** (Ehrenberg, 1828)
- Carapace with carinae .....……..... 8

8. Ventral carinae of second and third metasomal segments and ventral transverse carina of fourth segment armed with very strong denticles. ..... ***Odontobuthus bidentatus*** Lourenço et Pézier, 2002
- Ventral carinae of metasomal segments without very strong denticles.....……..... 9

9. Dentate margin of pedipalp chela movable finger with 4 terminal granules (3 terminal and one basal terminal). .....…..... ***Androctonus crassicauda*** (Olivier, 1807)
- Dentate margin of pedipalp chela movable finger with 5–7 terminal granules (4–6 terminal and one basal terminal).....……..... 10

10. Central median and posterior median carinae of carapace joined to form a continuous linear series of granules to posterior margin ... ***Compsobuthus*** ...….. 11
- Central median and posterior median carinae of carapace not joined to form a continuous linear series of granules to posterior margin ……..... 13

11. Male has longer metasoma than female. ....……..... ……***C. matthiesseni*** (Birula, 1905)
- Length of metasoma the same in both sexes. 12

12. Pectinal teeth number 15–19. Male has much wider and shorter pedipalp chela ..….. ***C. jakesi*** Kovařík, 2003
- Pectinal teeth number 21–24. Width of pedipalp manus the same in both sexes ..... ***C. persicus*** **sp. n.**

13. Trichobothrium *db* on patella of pedipalp located usually between *est* and *dt*. Trichobothrium *db* may be on level with trichobothrium *est* or rarely between *est* and *esb*. Carinae of carapace not forming a lyre-shaped configuration. Ventrolateral carinae on the fifth metasomal segment with all granules more or less equal in size. ……..... ***Hottentotta saulcyi*** (Simon, 1880)
- Trichobothrium *db* on patella of pedipalp always located between *est* and *esb*. Carinae of carapace forming a lyre-shaped configuration. Ventrolateral carinae on the fifth metasomal segment with irregular granules. ..…***Mesobuthus eupeus phillipsii*** (Pocock, 1889)

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