



Figure 2: *Buthus chambiensis* sp. n., ♂ holotype, dorsal aspect.



Figure 3: *Buthus chambiensis* sp. n., ♂ holotype, ventral aspect.



Figure 4: *Buthus chambiensis* sp. n., ♀ allotype, dorsal aspect.



Figure 5: *Buthus chambiensis* sp. n., ♀ allotype, ventral aspect.



Figure 6: *Buthus barcaeus* Birula, 1909, comb. n., immature ♀ from Libya (Tarabulus Province, Abu Qurayn, 31°26'N, 15°14'E, ca. 52 m a. s. l., 14 April 2003, leg. M. Kaftan).

on each side. Colors tend to be more contrasting in females. For habitus see Figs. 7 and 8.

Mesosoma and carapace: The mesosoma is granulated, with three median carinae, and the seventh segment ventrally bears four inconspicuous carinae. The carapace is sparsely granulated, with carinae typical for the genus. Pectinal teeth number 26–28 in females and 31–33 in males.

Metasoma and telson: The first segment bears 10 carinae, the second through fourth segments bear eight carinae (the lateral surface of the second and third segments bears a row of granules that exceeds one-half of the segment's length but does not form a complete carina). The fifth metasomal segment has five carinae. The ventrolateral carinae on the fifth segment terminates in two lobes. The ventral carinae on the second and third segments, namely in females, posteriorly bear two or three large granules. The surface between carinae is finely granulated, namely in males, in females it may be smooth. The telson is bulbous, with the aculeus as long as or shorter than the vesicle.

Legs: Tarsomeres of legs I to III have very dense bristlecombs. The legs IV are only hirsute. All legs have

tarsomeres, tibia, and patella hirsute also on the ventral surfaces. Tibial spurs of legs III and IV are moderate.

Pedipalps: The movable fingers bear 12 rows of granules that have one internal and one external granule and three distal granules. The chela is smooth, in some males with weakly indicated smooth carinae; the femur and patella bear granulate carinae. The chela is almost equally narrow in both sexes, its length to width ratio is 4.4–4.7.

Affinities. The described features distinguish *Buthus dunlopi* sp. n. from all other species of the genus. A key to the Tunisian species is presented below. *B. dunlopi* sp. n. has the same sexual dimorphism as *B. tunetanus*, but is larger, has a differently colored metasoma and its chela of pedipalp is markedly more robust. The chela length to width ratio in *B. tunetanus* is always lower than 3.5, whereas in *Buthus dunlopi*, sp. n. it is 4.4–4.7.

***Buthus paris* (C. L. Koch, 1839)**
(Figs. 9–11, Table 1)

Androctonus paris C. L. Koch, 1838: 25, fig. 352; C. L. Koch, 1850: 90.



Figure 7: *Buthus dunlopi* sp. n., ♂ holotype, dorsal aspect.



Figure 8: *Buthus dunlopi* sp. n., ♀ allotype, dorsal aspect.



Figure 9: Locality of *Buthus paris* (C. L. Koch, 1839) (Tunisia, Le Kef Province, 6 km N Le Kef, 1 June 2005).

Buthus occitanus paris: Birula, 1903: 107; Birula, 1914: 644; Vachon, 1949: 380; Vachon, 1952: 308; Kovařík, 1998: 106; Fet & Lowe, 2000: 96.

Buthus paris: Lourenço, 2003: 896.

= *Androctonus clytoneus* C. L. Koch, 1838: 70, fig. 384; C. L. Koch, 1850: 90 (syn. by Kraepelin, 1891: 196).

Material examined: **Tunisia**, Kairovan, 1♂, May 1930 (collector unknown); Le Kef, 1 juv. 1970 (collector unknown); Le Kef Province, 6 km N Le Kef (Fig. 9), 1 June 2005, 1♂ (Fig. 10) 1♀, leg. F. Kovařík.

Diagnosis: Total adult length 55–75 mm. Legs, metasoma and pedipalps uniformly reddish brown, carapace and mesosoma dark with conspicuous orangish-brown sagittal band or at least spots. Movable fingers of pedipalps bear 12 to 14 rows of granules with one internal and one external granule and three distal granules. In female, chela of pedipalp wider than in male. Pectines with 23–28 teeth in females and 29–34 in males. First metasomal segment with 10 carinae, second to fourth segments with eight carinae (lateral surface of second and third segments with row of granules that may exceed one-half of segment length but does not form a complete carina). Fifth metasomal segment with five carinae. Ventrolateral carinae on metasomal segment terminates in two lobes. Telson bulbous, aculeus shorter than vesicle.

Buthus tunetanus (Herbst, 1800)
(Figs. 12–19, Table 1)

Scorpio tunetanus Herbst, 1800: 68.

Androctonus (Leiurus) tunetanus: Hemprich & Ehrenberg, 1828: 4; Hemprich & Ehrenberg, 1829: 354.

Androctonus (Leiurus) tunetanus genuinus: Hemprich & Ehrenberg, 1831 (pages unnumbered).

Androctonus tunetanus: C. L. Koch, 1845: 15, fig. 968; C. L. Koch, 1850: 90; C. Koch, 1873: 106.

Buthus occitanus tunetanus: Birula, 1903: 107; Vachon, 1949: 344; Vachon, 1952: 272; Levy & Amitai, 1980: 21; Kovařík, 1998: 106; Fet & Lowe, 2000: 97; Lourenço, 2002: 110; Babay & Noura, 2003: 54.

Buthus tunetanus: Lourenço, 2003: 897.

Material examined: **Tunisia**, Gafsa Province, near Gafsa, 1964, 1♀ (collector unknown); Gafsa Province, 25 km SW Mezzouna, near Bou Hedma National Park, 23 April 2004 (Fig. 12), 2 juvs., leg. F. Kovařík; Beja Province, Jebel Sabbah Mts., Bou Salem, 10 km NW Balta, 27 May 2005 and 2 June 2005 (Figs. 13 to 15), 4♂, 8♀, 3 immatures, 2 juvs. (Figs. 16–19), leg. F. Kovařík.

Diagnosis: Total adult length 60–80 mm. Legs, metasoma, and pedipalps uniformly yellowish or reddish brown; mesosoma and carapace darker, with median and



Figure 10: *Buthus paris*, ♂ at the locality pictured in Figure 9.



Figure 11: *Buthus paris*, ♀ from Morocco (Meknes prov., 17 km NW of Azrou, 33°34.23'N, 05°19.69'W, 16 February 2005, leg. R. Fouqu , H. Fouqu  & S. Be v r).



Figure 12: Locality of *Buthus tunetanus* (Herbst, 1800) (Tunisia, Gafsa Province, 25 km SW Mezzouna, near Bou Hedma National Park, 23 April 2004).

lateral yellowish-brown spots. Movable fingers of pedipalps bear 10 or 11 rows of granules with one internal and one external granule and three distal granules. Chela of pedipalp wide in both sexes, in males wider than in females. Pectines with 24–29 teeth in females and 29–35 in males. First metasomal segment with 10 carinae, second to fourth segments with eight carinae (lateral surface of second and third segments with row of granules that reaches midlength of segment but does not form a complete carina). Fifth metasomal segment bears five carinae. Ventrolateral carinae terminates in two lobes. Telson bulbous, aculeus shorter than vesicle.

Comments. The type of *Buthus tunetanus* (Herbst, 1800) is considered lost (Fet & Lowe, 2000: 97), but this species can be recognized by its size and chela wider in males than in females, a feature that has long been accepted as diagnostic (see fig. 381 in Vachon, 1952: 273).

Buthus intumescens (Ehrenberg in Hemprich & Ehrenberg, 1829), **comb. n.**
(Fig. 20)

Androctonus (Leiurus) tunetanus intumescens Ehrenberg in Hemprich & Ehrenberg, 1829: 354.

Androctonus (Liurus) tunetanus intumescens: Hemprich & Ehrenberg, 1831 (pages unnumbered).

Androctonus (Leiurus) tunetanus intermedius Ehrenberg in Hemprich & Ehrenberg, 1829: 355, **syn. n.**

Androctonus (Liurus) tunetanus intermedius: Hemprich & Ehrenberg, 1831 (pages unnumbered).

Buthus occitanus mardochei var. *israelis* Shulov & Amitai, 1959: 219, **syn. n.**

Buthus occitanus israelis: Levy & Amitai, 1980: 16, figs. 25–29; Fet & Lowe, 2000: 95.

Material examined: **Egypt**, 1♀, leg. F. W. Hemprich & C. G. Ehrenberg (ZMHB No. 145, holotype of *A. t. intumescens*). **?Yemen**, Lohaie, now Al Luhayyah, probably incorrect locality, 1♀, leg. F. W. Hemprich & C. G. Ehrenberg (ZMHB No. 146, holotype of *A. t. intermedius*). **Israel**, south part of Negev, Vadi Hazaz near Sede Boqer (Haluqim Ridge), November–December 2004, 1♂ 3♀, 5 juvs., leg. J. Král (FKCP).

Comments. It was important to examine the type of *Androctonus (Leiurus) tunetanus intumescens* Ehrenberg in Hemprich & Ehrenberg, 1829, hitherto considered a syn-