coxapophyses have broadly expanded anterior lobes. The sternum is subpentagonal. The legs lack tibial spurs, but both prolateral and retrolateral pedal spurs are present. Tarsi bear two rows of ventral setae and a median row of spinules. The telson is without a subaculear tubercle.

Chaerilus tessellatus Qi, Zhu et Lourenço**, sp. n**.
(Figs. 109–125)

Diagnosis: The new species is of moderate size and smooth median ocular tubercles with a pair of small median eyes, which are almost as large as lateral eyes (Fig. 118). The new species also has two pairs of dentated carinae on sternites V. Mesosomal tergites carinated, with a pair of median circular spots and transverse yellow spots (Fig. 109).

Comments. *Chaerilus tessellatus* **sp. n.,** can be distinguished from other *Chaerilus* species, and in particular from *Chaerilus truncatus* Karsch, 1879, the most geographically close species of the genus, by the following features: (a) basal segment of chelicerae is not lustrous but without granules on dorsal surface; (b) lateral eye tubercles are almost absent; (c) mesosomal tergites are not lustrous but without granules, (d) sternite V bears two pairs of dentated carinae.

Material. 1♀ holotype: China: Tibet, Mêdog district (29°02'N, 95°03'E), Beibeng town, 22 August 2003, Feng Zhang leg. (MHBU). Paratypes: 2 ♀, Tibet, Bomi district (29°08'N, 95°07'E), 14 August 2002, Ming-Sheng Zhu leg. (one in MHBU and one in MNHN); 1 ♀, Tibet, Mêdog district, 108K-8K, 17 August 2003, Feng Zhang leg. (MHBU).

Etymology: The specific name refers to the spots on tergites.

Description (based on male holotype):
Coloration: Basically dark brown. Carapace is reddish-brown. Tergites are reddish-brown and darker than carapace, with a yellow stripe. Metasoma: all segments are dark brown, with some dark pigment on carinae. Telson is brown; aculeus is yellow at the base and black at the extremity. Chelicerae are yellowish with variegated brown spots; the fingers have darker denticles. Pedipalps: femur is brown; patella and chela are reddish-brown. Legs are sandy beige on proximal segments and yellowish on distal segments. Venter and sternites are pale brown. Sternite VII is darker than the others.

Morphology: Carapace is carinated, with densely coarse granules; lateral furrow is not prominent but posterior lateral furrow is more deep and distinct; median furrows are shallow at median eye level but deeper in the middle and posterior portion and bifurcated backwards. Lateral carinae are well developed; they are granular up to the lateral ocular tubercles. There is a pair of lateral eyes. A pair of small median eyes is same size as lateral eyes, and are located anterior to the center of the carapace. Tergites are coarsely granular. Each of tergites I-VI bears a pair of obsolete granular carinae on posterior margin. Tergite VII has two pairs of granular carinae developed only on posterior portion. Sternum is pentagonal and slightly longer than wide. Pectinal tooth count 5-5. Sternites are smooth; segment VII has two pairs of dentated carinae. Metasoma is about three times as long as carapace. Segment I is always wider than long; segments I to V have 10-10-10-8-7 carinae; segment V bears a ventromedian carina posteriorly bifurcated, all carinae are dentated. Vesicle is smooth. Chelicerae are small with elongated fingers; basal segment bears retiform dark brown pigmentation and smooth on ventral surface; thickly covered with numerous short, silky hairs, extending on ventral and dorsal portions of both fingers; the fingers are long and slender; their dentition characteristic for family and genus, but ventral inner edge of movable finger is provided with six minute teeth and immovable finger finely serrated.

Pedipalps: femur with dorsal internal and dorsal external carinae, which are minutely granular; ventral internal and ventral external carinae are smooth. Patella with dorsal and external carinae, which are granular; ventral carinae are smooth. Chela is rather narrow, with dorsal marginal, external secondary, and ventral internal carinae, which are moderately granular; ventral median carina is strong; tegument is granulated dorsally and punctated ventrally. Fingers are almost as long as manus and not flexed. Trichobothriotaxy of type B; orthobothriotaxic (Vachon, 1974); femur bears nine trichobothria, patella with 14, and chela with 14. Femur, patella, and tibia of leg all have yellow stripes. The legs are without tibial spur. Tarsus is provided with a pair of pedal spurs below with a row of long paired bristles. A single median row of short spinules is situated between the two rows of lateral setae on the ventral surface of leg tarsus.
Measurements (in mm) (female holotype). Total length, 48.93. Carapace: length, 7.01; anterior width, 2.68; posterior width, 7.01. Metasomal segment I: length, 2.68; width, 3.83. Metasomal segment V: length, 6.76; width, 2.30; depth, 2.30. Vesicle: width, 2.55; depth, 2.30. Pedipalp: femur length, 5.10, width, 2.42; patella length,

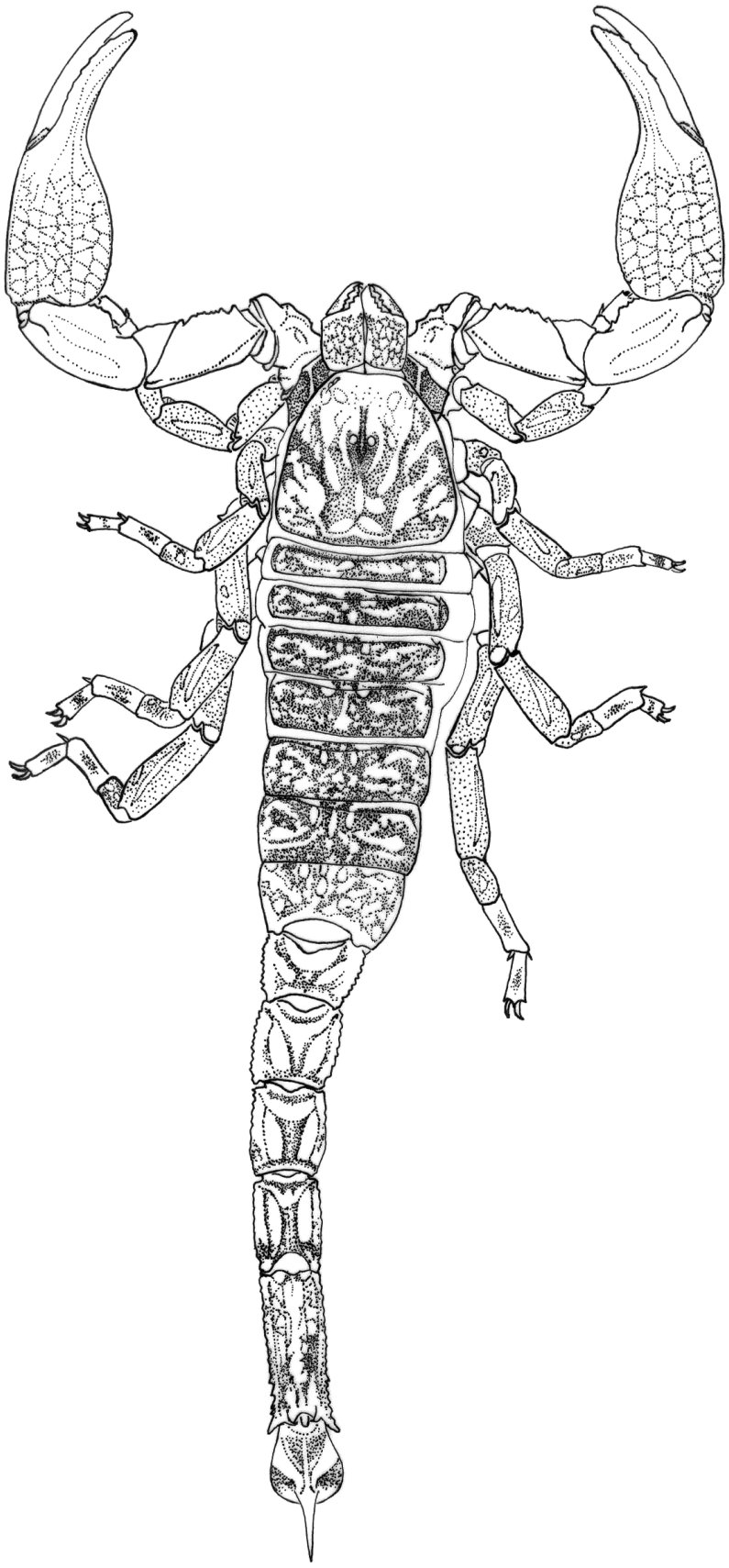
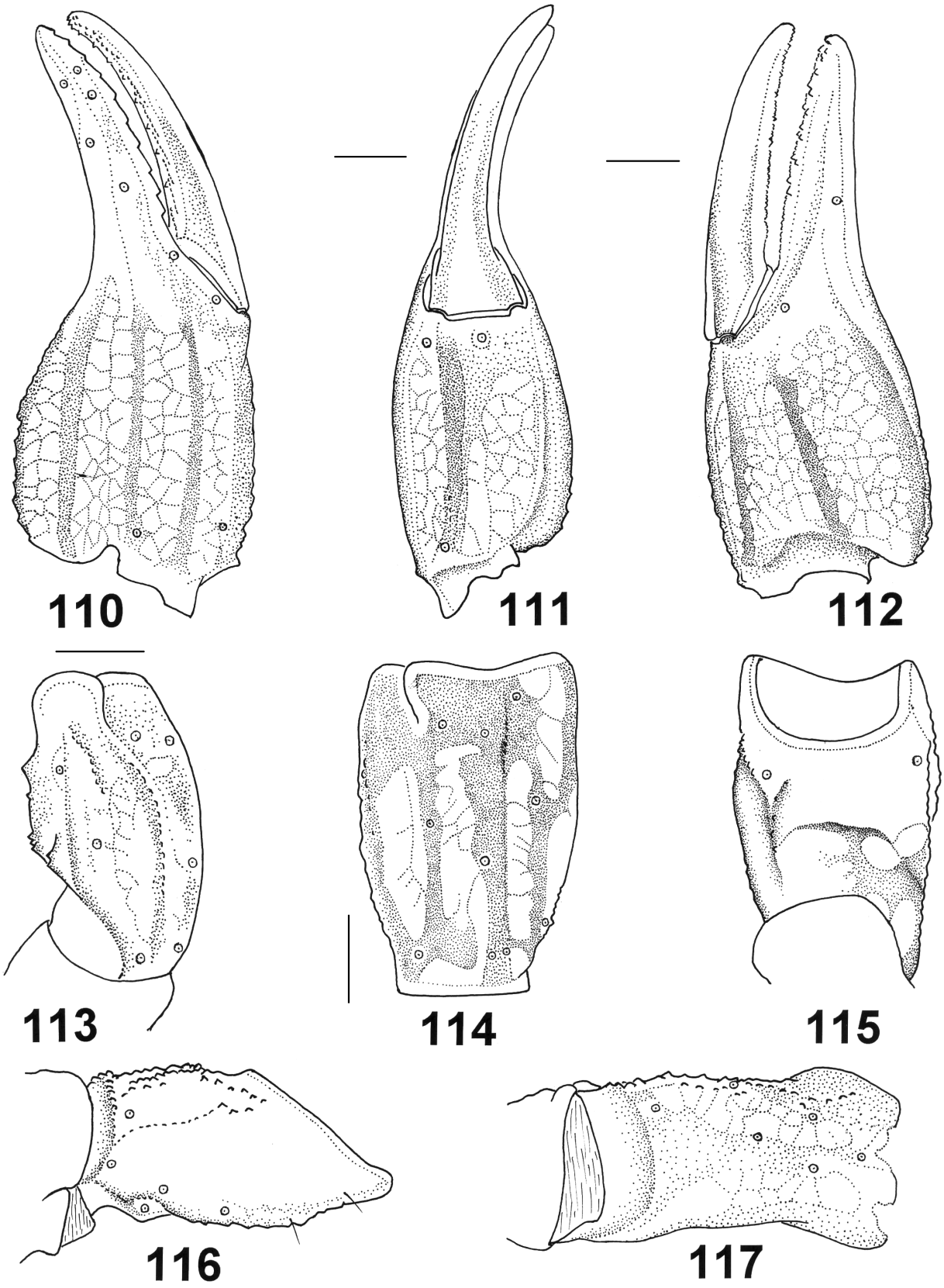
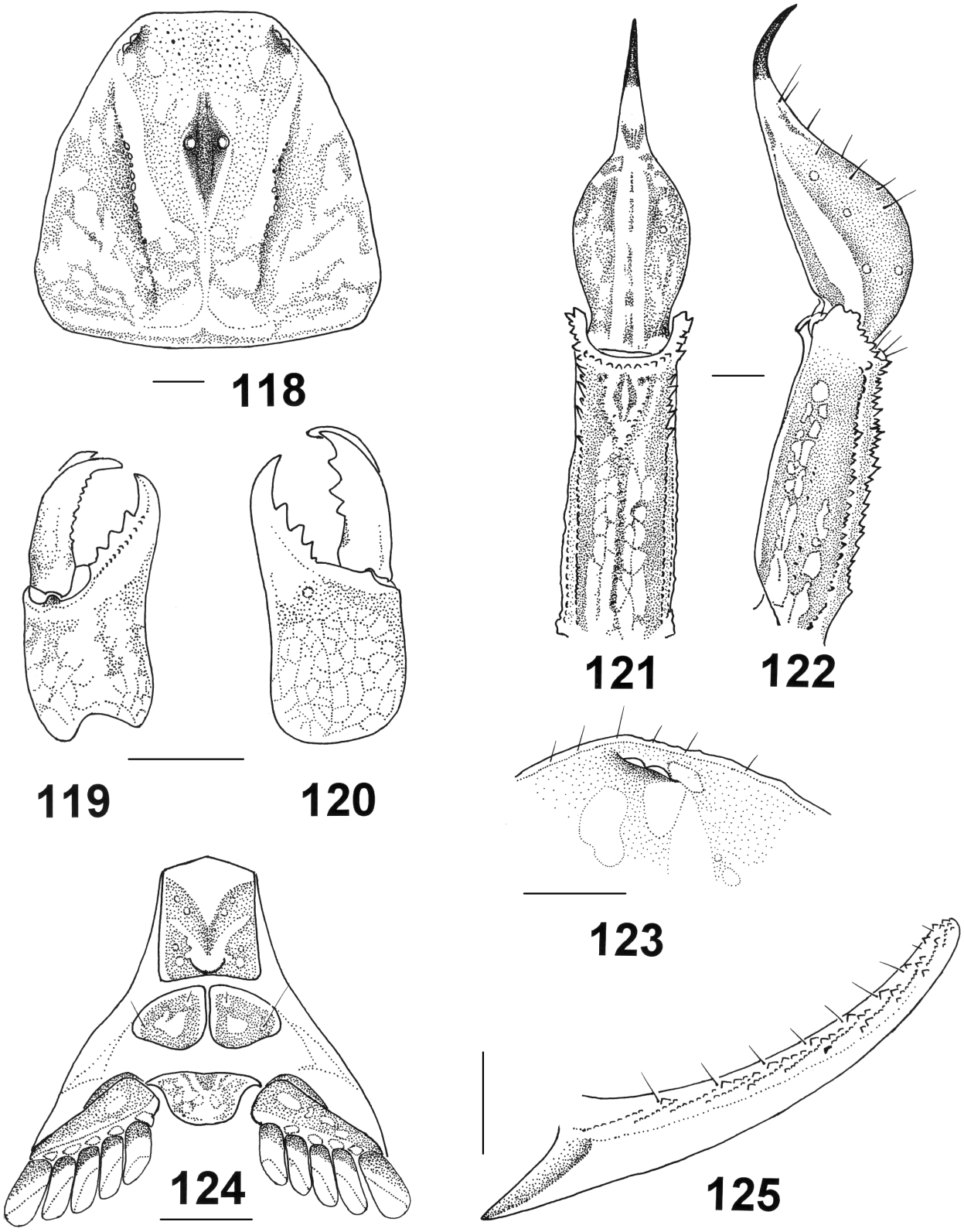


Figure 109: *Chaerilus tessellatus* **sp. n.**, female holotype, habitus. Total length 48.93 mm.



Figures 110–117: *Chaerilus tessellatus* **sp. n.**, female holotype. **110–112.** Chela, dorsoexternal, ventral and internal aspects. **113–115.** Patella, dorsal, external and internal aspects. **116–117.** Femur, dorsal and external aspects. Scales = 1 mm.



Figures 118–125: *Chaerilus tessellatus* **sp. n.**, female holotype. **118.** Carapace, dorsal aspect. **119–120.** Chelicera, ventral and dorsal aspects. **1121–122.** Metasomal segment V and telson, ventral and lateral aspects. **123.** Lateral ocular region, in detail, dorsal aspect. **124.** Sternum, genital operculum and pectines. **125.** Dentate margin of the pedipalp chela movable finger. Scales = 1 mm.

5.23, width, 2.55; chela length, 6.38, width, 4.21, depth, 4.08; movable finger length, 6.12.

Chaerilus pictus (Pocock, 1890) (= *C. gemmifer* Pocock, 1894)

(Figs. 126–143)

Uromachus pictus Pocock, 1890: 250.
Chaerilus pictus: Kraepelin, 1899: 159; Pocock, 1900: 61; Tikader & Bastawade, 1983: 332; Fet, 2000a: 327; Kovařík, 2000b: 53.
Chaerilus gemmifer Pocock, 1894: 81; Kraepelin, 1899: 159; Pocock, 1900: 61; Tikader & Bastawade, 1983: 346; Fet, 2000a: 326.

Diagnosis. The species is slightly smaller than the previous one (Fig. 126). It also differs from other species of the genus in possessing short, stout pedipalps with a more robust manus and smooth sternites. Its aculeus is very short, less than half of vesicle length and slightly curved (Figs. 139-140).

Comments. *Chaerilus gemmifer* Pocock, 1894, can be distinguished from other *Chaerilus* species, and in particular from *Chaerilus pictus* (Pocock, 1890), the most geographically related species of the genus by the following features: (a) body color dark brown to black, legs light brown to brown; (b) chela palm is longer than patella; (c) granules arranged in ridges and very closely grouped on distal portion of the base of fingers; (d) aculeus is short, less curved, and almost one-fourth of vesicular length.

Material: 1♀: Tibet, Nyingchi district, Bayizhen town (29°41' N, 94°21' E), 17 August 2002, Ming-Sheng Zhu leg. 1 juv., Bayi town, Linzhi district, Tibet, 2 August 2002, Ming-Sheng Zhu leg.; 1 juv., Bayi town, Linzhi district, Tibet, 6 August 2003, Feng Zhang leg. (All specimens are deposited in MHBU).

Coloration: Body color is dark brown to black. Ventral side of body is light brown to yellow. Metasoma is dark except for the light vesicle; aculeus is reddish. Chelicerae is light brown but reddish on fingers. Pedipalp is dark brown, and darker on carinae. Legs are from light brown to brown.
Morphology: The surface of carapace is covered with sparse coarse granules, and which are more coarse and dense on posterior lateral portion. Interocular portion bears less coarse weak granules and the granulation is even less expressed on posterior portion near median ocular tubercles. Lateral carinae are granular but the granules are almost obsolete, bordering the median flat portion. Median ocular furrows are not distinct; lateral median furrows are also less distinct and shallow; posterior lateral furrows are distinct and smooth; posterior median furrows are narrow, distinct, deep and bifurcated posteriorly. Lateral ocular tubercles are small and smooth, behind each are two lateral eyes accompanied by a ventrolateral amber colored circular spot. Median ocular tubercles are smooth and not elevated much, with a pair of median eyes situated anteriorly with the ratio 1: 1.9. Mesosoma: all tergites with sparse coarse granules, tergites I-VI are without distinct carinae, tergite VII has two pairs of granular lateral carinae, and the inner pair is short and developed only on middle portion. Sternites are smooth; spiracles are circular; lateral and posterior margin are smooth. Sternum is pentagonal and slightly longer than wide. Pectines are weakly developed. Genital operculum are fused. Metasoma is comparatively short with elongated telson and very short aculeus. All segments are granular, carinated and almost flat on dorsal surface. Basal segment of metasoma is always wider than long. Metasomal segments I-IV have ten carinae; on segments II-IV, a pair of lateral carinae weakens downwards and gradually disappears. Segment V bears seven carinae, and its ventromedian carina is posteriorly bifurcated and completely dentated. Chelicerae are small with elongated fingers; basal segment is granular on dorsal surface but smooth on ventral; thickly covered with numerous short, silky hairs, extending on ventral and dorsal portions of both fingers; the fingers are long and slender; their dentition characteristic for family and genus, but ventral inner edges of movable and immovable fingers with eight minute teeth, and finely serrated, respectively.

Pedipalps are short, stout and with robust manus, all digits are carinated. Femur is much shorter than carapace, carinated but dorsal inner carina granular and more distinct than dorsal outer carina; dorsal and ventral surfaces are finely granular. Patella is longer than femur but shorter than carapace; inner carinae are distinctly granular, outer carinae are smooth and obsolete. Chela manus is not very broad, with two finely granular carinae, one distinct and one weak. Finger is almost as long as manus and not curved. Trichobothriotaxy of type B; orthobothriotaxic (Vachon, 1974); femur with nine trichobothria, patella with 14, and chela with 14. Legs have smooth carinae, except on femur and patella of legs III and IV where carinae are weakly granular on outer or dorsal portion; no tibial spur. Tarsus has a pair of pedal spurs; ventrally with two paired rows of long setae. A single median row of short spinules is situated between the two rows of lateral setae on the ventral surface of leg tarsus.
Measurements (in mm) (female specimen). Total length, 39.89. Carapace: length, 4.85; anterior width, 2.04; posterior width, 5.48. Metasomal segment I: length, 2.42; width, 3.06. Metasomal segment V: length, 5.10; width, 1.79; depth, 1.79. Vesicle: width, 2.17; depth, 1.91.

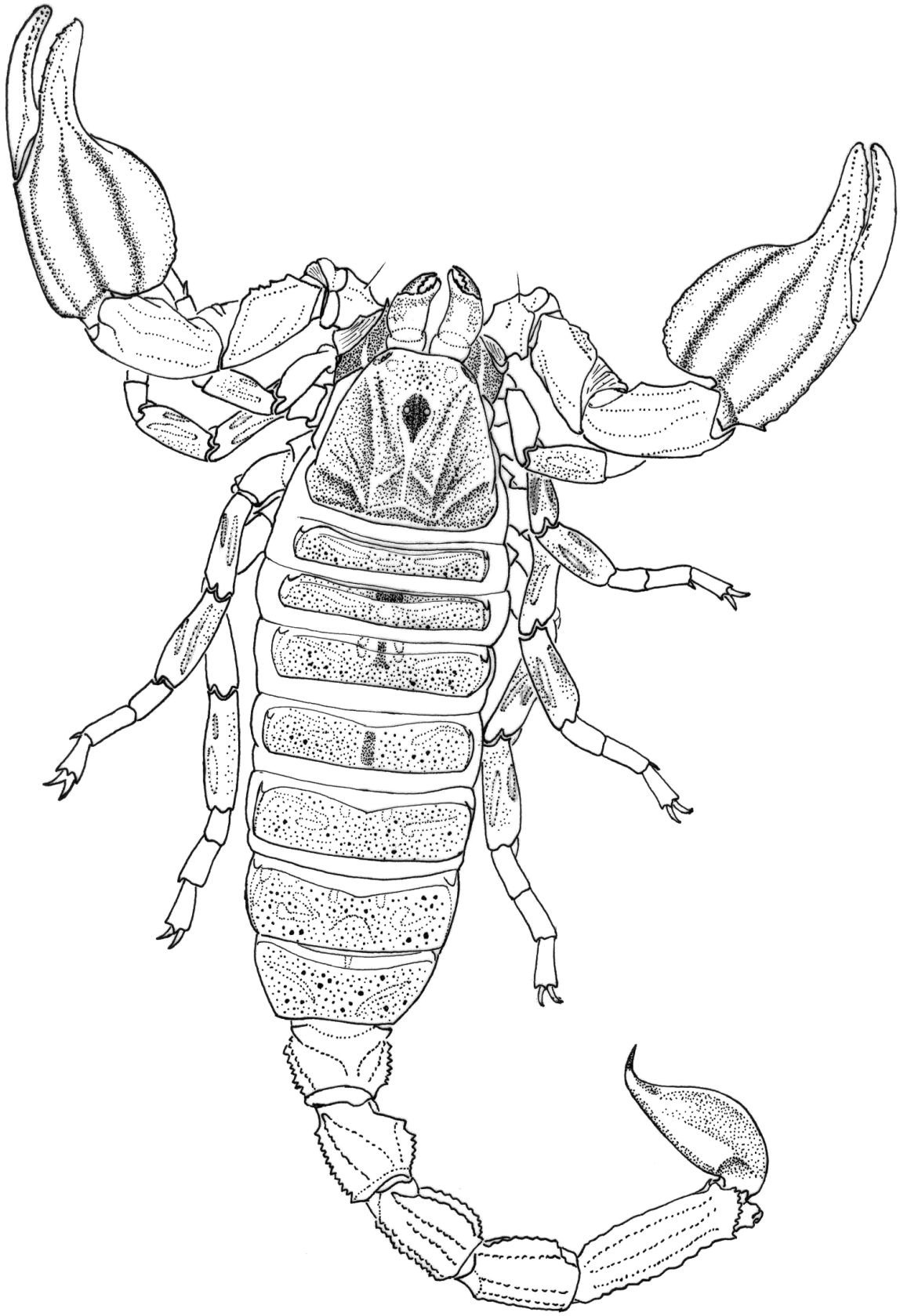
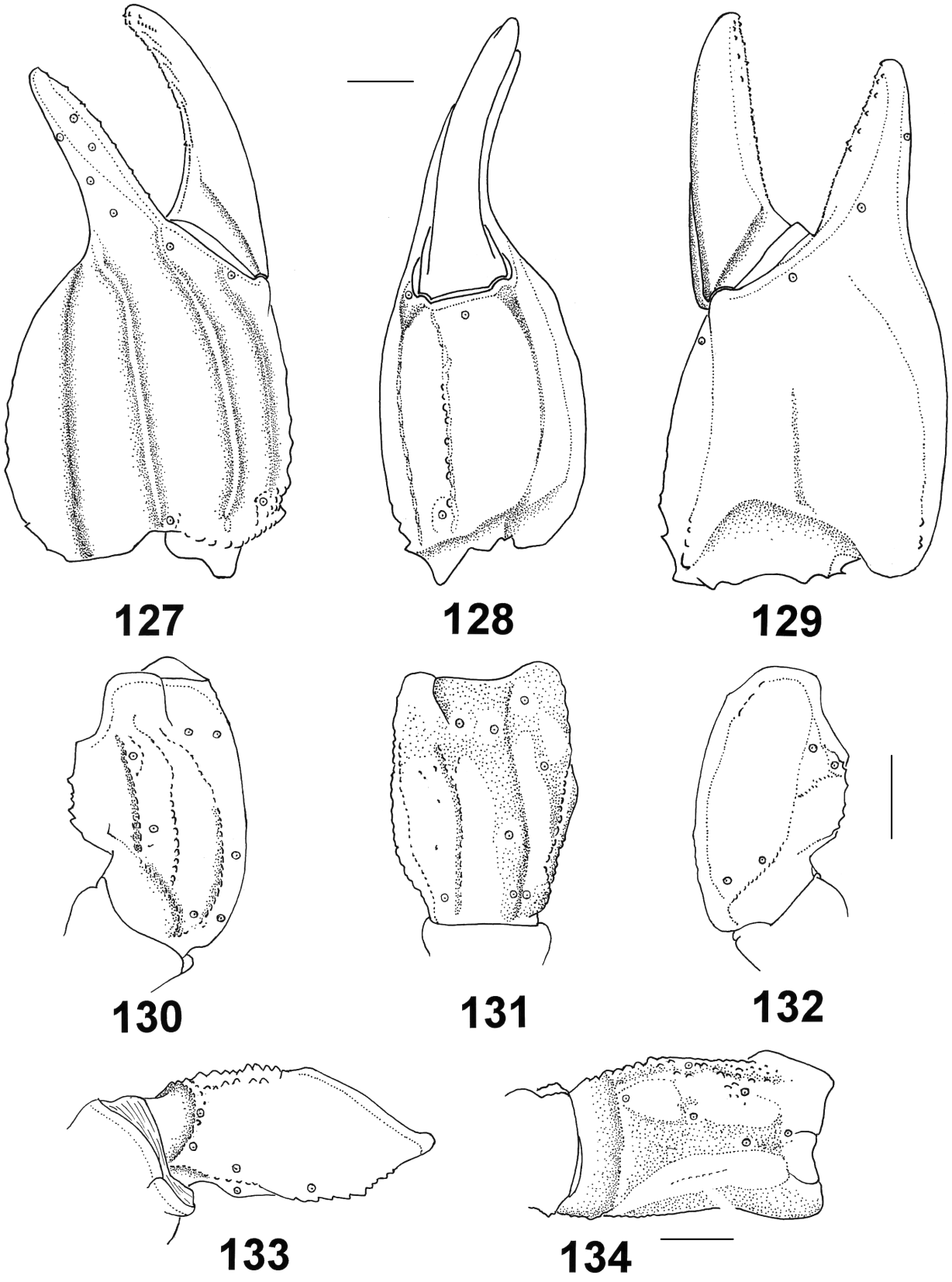
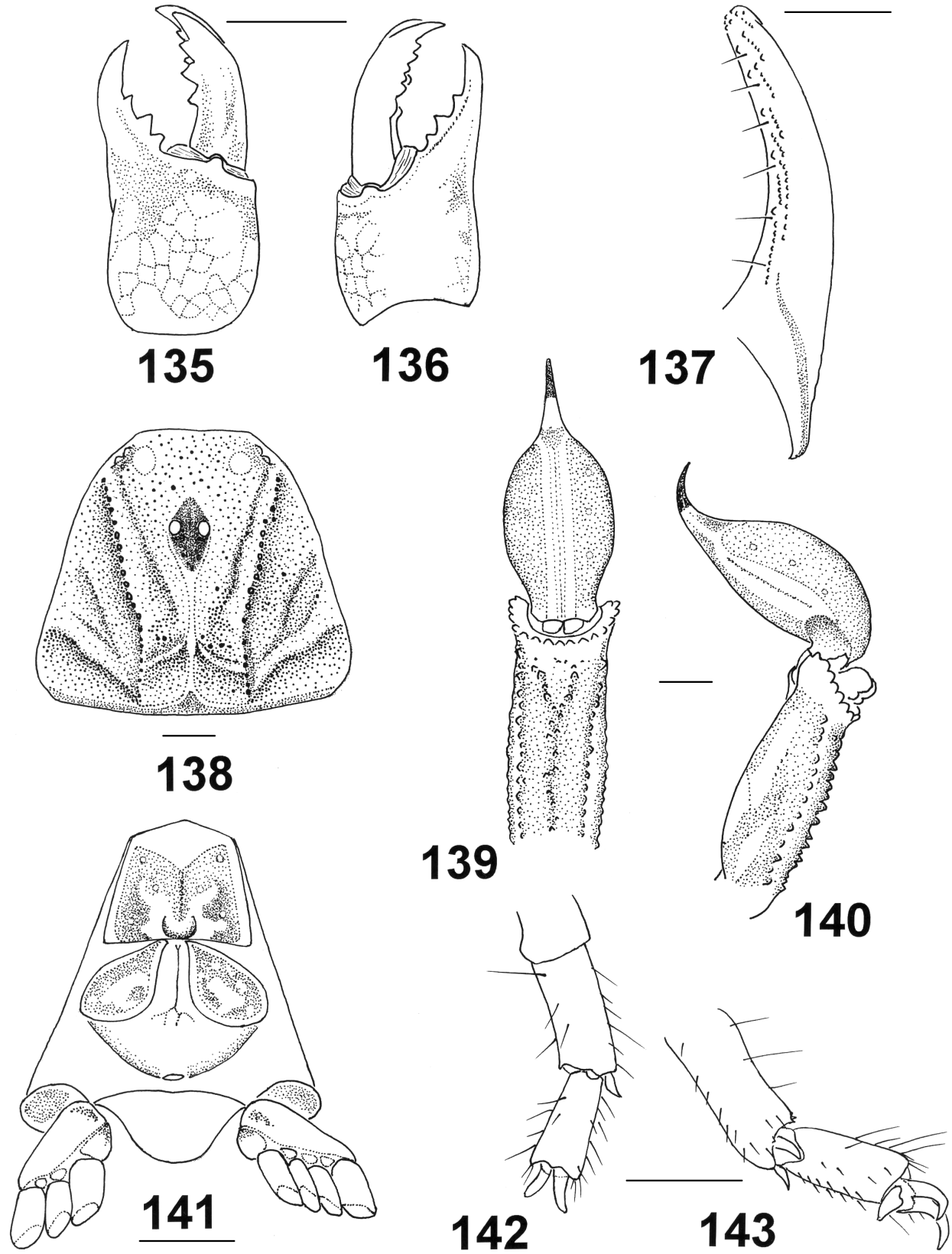


Figure 126: *Chaerilus pictus* Pocock, 1890, female, habitus. Total length 39.89 mm.



Figures 127–134: *Chaerilus pictus* Pocock, 1890, female. **127–129.** Chela, dorsoexternal, ventral and internal aspects. **130–132.** Patella, dorsal, external and ventral aspects. **133–134.** Femur, dorsal and external aspects. Scale = 1 mm.



Figures 135–143: *Chaerilus pictus* Pocock, 1890, female. **135–136.** Chelicera, dorsal and ventral aspects. **137.** Disposition of granulations on the dentate margins of the pedipalp chela movable finger. **138.** Carapace dorsal aspect. **139–140.** Metasomal segment V and telson, ventral and lateral aspects. **141.** Sternum, genital operculum and pectines. **142–143.** Legs III and IV, lateral and dorsal aspects. **131.** Scales = 1 mm.

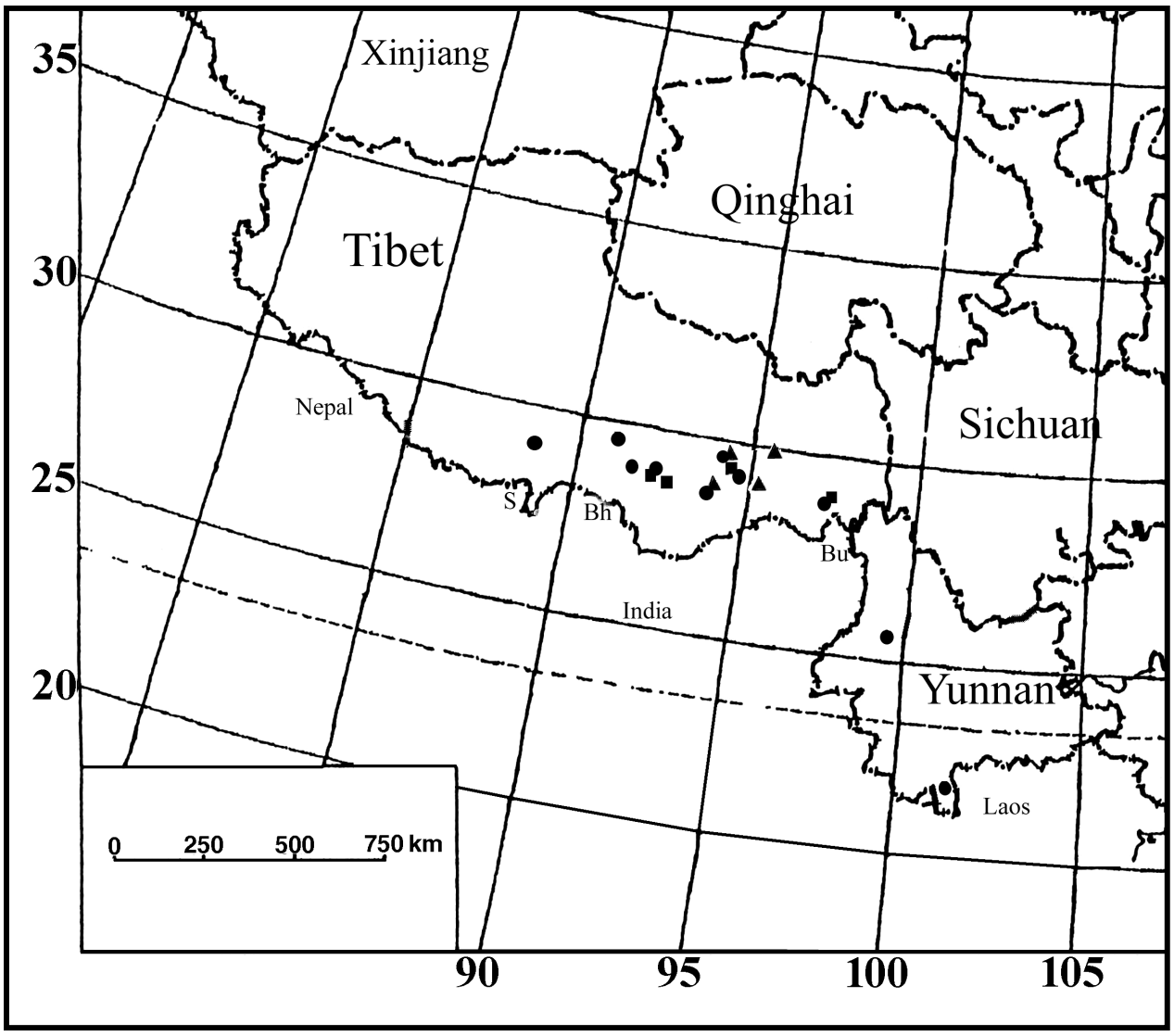


Figure 144: Map of China (Tibet), showing the type localities of the new species, and the new records of known species for Tibet. Map abbreviations: ▲ –*Chaerilus*, ■ –*Scorpiops*, ● –*Euscorpiops*; S –Sikkim, Bh –Bhutan, Bu –Burma.

Pedipalp: femur length, 3.32, width, 1.79; patella length, 3.70, width, 2.17; chela length, 4.34, width, 4.21, depth, 2.93; movable finger length, 4.08.

List of the known Chinese species of the genus *Chaerilus*:

Chaerilus pictus (Pocock, 1890) (=*Chaerilus gemmifer* Pocock, 1894)
Chaerilus tessellatus Qi, Zhu et Lourenço**, sp. n**.

Key to the known Chinese species of the genus *Chaerilus*

Manus is short, broad and robust with carinae well-expressed; carinae of metasoma crenulated …… *C. pictus* (=*C. gemmifer*)
Manus is not too broad, with carinae well-expressed; carinae of metasoma serrated …... *C. tessellatus*, **sp. n.**

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