

FIRST RECORDS OF THE FAMILY OCHYRO CERATIDAE (ARACHNIDA: ARANEAE) FROM CHINA, WITH DESCRIPTIONS OF A NEW GENUS AND EIGHT NEW SPECIES

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ABSTRACT. – The family Ochyroceratidae is reported for the first time from Hainan Island, China. Eight new species of the genera *Flexicrurum*, new genus, *Ouette*, and *Speocera*, are described, i.e. *Flexicrurum flexicrurum* (male), *F. longispina* (male), *F. minutum* (male), *Ouette gyrus* (female, male), *Speocera asymmetrica* (female, male), *S. bicornea* (female, male), *S. octodentis* (male), and *S. songae* (female).

KEY WORDS. – Hainan Island, cosmotropic, troglobites, morphology, taxonomy.

INTRODUCTION

Ochyroceratidae is a small (total length 0.6–3.0 mm), web-spinning haplogyne spider family. It can be easily distinguished from the other spider families by the combination of the following characters: tarsi with three claws on an onychium, chelicerae free and armed with several denticles in addition to a lamella, 6 eyes with ALE and PME forming a straight anterior row and PLE in posterior row, well developed colulus, and an abdomen without anterior sclerotized ridge. It is a peculiar feature that in many theotimines a pair of chitinized ducts run along the surface from a separate copulatory opening towards the spermathecae (Deeleman-Reinhold, 1995).

The family is cosmotropic, and can be found in the tropic living among litter or as troglobites (Saaristo, 1998; Baptista, 2003). It is common in the Indo-Pacific region, constituting one of the ecological counterparts of the Linyphiidae of the northern temperate zone (Deeleman-Reinhold, 1995). Ochyroceratids spin irregular spacewebs in dark, damp places. Eggs are carried by chelicerae. Little is known about the behaviour of these litter-dwelling species (Shear, 1986). Several species are known to be parthenogenetic. A total of 13 genera and 146 species are recorded worldwide (Platnick, 2006), and none of them were reported from China (Wunderlich & Song, 1998; Song et al., 1999).

In an expedition to Hainan Island for the investigation of cave fauna, some ochyroceratids were collected. This is the first time the family Ochyroceratidae is reported from China. Some specimens have very long legs and show morphological affinities to the Pholcidae, but a detailed study reveals that they belong to the Ochyroceratidae (i.e. subfamily

Psilodercinae). They are similar to pholcids-like genera of *Althepus* Thorell, 1898, and *Leclercera* Deeleman-Reinhold, 1995, but they are different from *Althepus* and *Leclercera* due to the absence of cheliceral promarginal teeth, the presence of small denticles on posterior surface of fang, the nearly perpendicular orientation of abdomen to carapace, the special strongly inner turned tibia in male palp, the complicated conductor, and the additional slender bulbal apophysis. As a result, a new genus, *Flexicrurum*, is erected here, and three new species are recognized. Including the other five new species of the genera *Ouette* and *Speocera*, one new genus and eight new species are described in the present paper.

MATERIAL AND METHODS

Specimens were examined using an Olympus SZX12 stereomicroscope. Further details were studied under an Olympus BX51 compound microscope. All illustrations were made using a drawing tube and inked on ink jet plotter paper. Photos were made with an Olympus C7070 wide zoom digital camera (7.1 megapixels) mounted on an Olympus SZX12 dissecting scope. Male palps and female genitalia were examined and illustrated. Vulvae of female were cleared in lactic acid.

All measurements were measured using an Olympus BX51 compound microscope and given in millimeters (mm). Leg measurements are shown as: total length (femur, patella, tibia, metatarsus, tarsus). Palp measurements are shown as: total length (femur, patella, tibia, tarsus). Legs segments were measured on their dorsal side. The bulb was measured from base to tip, excluding the apical appendages. Taxonomic descriptions partly follow the format of Deeleman-Reinhold (1995).

All type specimens are deposited in the Institute of Zoology, Chinese Academy of Sciences in Beijing (IZCAS).

TAXONOMY

OCHYROCERATIDAE Fage, 1912

Flexicrurum, new genus

Type species. – *Flexicrurum flexicrurum*, new species.

Etymology. – The name is from the Latin “*flex* = curved, and *crur* = leg”, and refers to the inner turned palpal tibia of male. Gender neutrum.

Diagnosis. – The new genus is similar to the pholcids-like genera of *Althepus* Thorell, 1898, and *Leclercera* Deeleman-Reinhold, 1995, but it can be distinguished by the absence of cheliceral promarginal teeth, the presence of small denticles on posterior surface of fang, the nearly perpendicular orientation of abdomen to carapace, the special strongly inner turned tibia in male palp, the complicated conductor, and the additional slender bulbal apophysis.

Description. – Carapace posteriorly truncated, thorax with shallow fovea and does not reach the posterior thoracic margin. Eyes 6, composed of a straight transverse row of 4 eyes, and 2 posteriors, connate with the anterior laterals. Clypeus slanting, ratio carapace/clypeus about 3 : 1 to 3.5 : 1. Cheliceral promargin without teeth, retromargin with 2 small teeth; posterior surface of fang with 13–17 small denticles. Legs without spine. Leg formula: 1 4 2 3. Abdomen elongate, nearly perpendicular to thorax in lateral view. Booklungs present. Colulus narrow, 2.5 times longer than wide, half as long as the anterior spinnerets. Male palpal tibia strongly inner curved. Tarsus with a strong lateral protrusion, and with a small postero-lateral protrusion bearing a strong seta. Conductor complicated. Bulb with a slender apophysis.

Flexicrurum flexicrurum, new species (Figs. 1A–D, 2A–E, 10)

Material examined. – Holotype: male (IZCAS), Mountain Wuzhishan (18°49'N 109°39'E), Wuzhishan City, Hainan Island, China, coll. X. Han, 16 Apr.2005.

Diagnosis. – The new species can be distinguished from *F. longispina*, new species, and *F. minutum*, new species, by the modified maxillae, the differences in patterns of carapace and abdomen, the presence of rings on femur and tibia, and the differences of conductor details.

Description. – Male: Total length 1.51. Carapace 1.04 long, 0.86 wide; abdomen 1.20 long, 0.55 wide. Carapace with three wide longitudinal dark bands, lateral margin rounded, but posterior widely truncated. Anterior margin of thoracic region distinctly elevated. Before it a light rounded patch present on middle area. The fovea is shallow and does not reach the

posterior thoracic margin. Clypeus slanting, with a wide longitudinal dark band on middle area. The ratio of carapace to clypeus is about 3 : 1. Chelicerae creamy. Cheliceral promargin without teeth, retromargin with 2 small teeth. The posterior surface of fang provided with 15 small denticles. Maxillae light pigmented, with small sclerotized denticles on antero-inner margin. Labium dark, basally with two light rounded area. Sternum dark. Abdomen is strongly perpendicular to carapace in lateral view, and with complicated patterns on dorsal and ventral surfaces. Legs brown, femur with one narrow white ring distally, tibia with two broad white ring, metatarsus and tarsus nearly white. Leg measurements: I 10.23 (2.68, 0.27, 3.10, 2.98, 1.20); II 7.56 (2.08, 0.25, 2.13, 2.05, 1.05); III 6.05 (1.63, 0.25, 1.63, 1.65, 0.89); IV 9.23 (2.53, 0.27, 2.70, 2.55, 1.18). Leg formula: 1 4 2 3. Palp measurements: 1.34 (0.61, 0.21, 0.35, 0.17), bulb 0.39 long. Palpal femur distally slightly incrassated and upward, then downwards forward. Patella downward and connected the strongly inner turned but straight tibia. Palpal tarsus slightly upward, provided with a strong lateral protrusion. Tibia and tarsus dark pigmented. Bulb with a slender apophysis. Conductor complicated.

Female: Unknown.

Etymology. – The specific name *flexicrurum* denotes that this is the type species of the genus *Flexicrurum*.

Flexicrurum longispina, new species (Figs. 1E–H, 3A–D, 10)

Material examined. – Holotype: male (IZCAS), Xian'an'shilin Cave (18°36'N 109°25'E), Maogan Town, Baoting County, Hainan Island, China, coll. Y. Tong, 13 Apr.2005.

Diagnosis. – The new species is similar to *F. flexicrurum*, new species, and *F. minutum*, new species, but can be distinguished from these two species by the deep pigmented tibia and tarsus, the relatively straight lateral margin of carapace, the different patterns of ventral and dorsal abdomen, and the presence of a long spine-shaped protuberance on latero-dorsal surface of palpal bulb.

Description. – Male: Total length 1.81. Carapace 0.92 long, 0.76 wide; abdomen 1.13 long, 0.54 wide. Pattern of carapace as *F. minutum*, new species, but with relatively straight lateral margin. Clypeus as *F. minutum*, new species, but relatively short. The ratio of carapace to clypeus is about 3.5 : 1. Chelicerae creamy. Cheliceral promargin without teeth, retromargin with 2 small teeth. The posterior surface of fang provided with 15–17 small denticles. Maxillae light pigmented, labium as *F. minutum*, new species. Sternum dark. Abdomen is nearly perpendicular to carapace in lateral view, and with complicated patterns on dorsal and ventral surfaces. Femora brown, the other segments light brown, without distinct annulations. Leg measurements: I 9.60 (2.60, 0.25, 2.85, 2.70, 1.20); II 6.93 (1.98, 0.25, 1.93, 1.89, 0.88); III 5.21 (1.50, 0.25, 1.25, 1.51, 0.70); IV 8.51 (2.33, 0.23, 2.45, 2.45, 1.05). Leg formula: 1 4 2 3. Palp measurements: 1.37

(0.61, 0.19, 0.35, 0.22), bulb 0.37 long. Palpal femur, patella and tibia modified as *F. flexicrurum*, new species. Distal tibia and most area of tarsus strongly dark pigmented. Palpal tarsus with a strong lateral protrusion. Bulb with a slender apophysis, and on dorso-lateral surface with a single long spine-shaped protuberance. Conductor complicated.

Female: Unknown.

Etymology. – The specific name is from the Latin “*long*, and *spina* = spine”, and refers to the long spine-shaped protuberance on latero-dorsal surface of palpal bulb.

***Flexicrurum minutum*, new species**

(Figs. 1I–L, 4A–E, 10)

Material examined. – Holotype: male (IZCAS), Bawangling National Natural Reserve (19°04'N 109°08'E), Changjiang County, Hainan Island, China, coll. G. Deng, 22 Mar.2005.

Diagnosis. – The new species can be distinguished from *F. flexicrurum*, new species, and *F. longispina*, new species, by the different patterns of ventral and dorsal abdomen, the differences of male palp details, and the shorter legs and the smaller body size.

Description. – Male: Total length 1.39. Carapace 0.85 long, 0.74 wide; abdomen 0.88 long, 0.46 wide. Pattern of carapace as *F. flexicrurum*, new species, but without the light round patch before thoracic anterior margin that presented in *F. flexicrurum*, new species. Clypeus as *F. flexicrurum*, new species, the ratio of carapace to clypeus is about 3 : 1. Chelicerae creamy. Cheliceral promargin without teeth, retromargin with 2 small teeth. The posterior surface of fang provided with 13 small denticles. Maxillae light pigmented, labium dark. Sternum dark. Abdomen is nearly perpendicular to carapace in lateral view, and with complicated patterns on dorsal and ventral surfaces. Legs light brown, tibia with one white ring distally. Leg measurements: I 7.64 (2.05, 0.25,

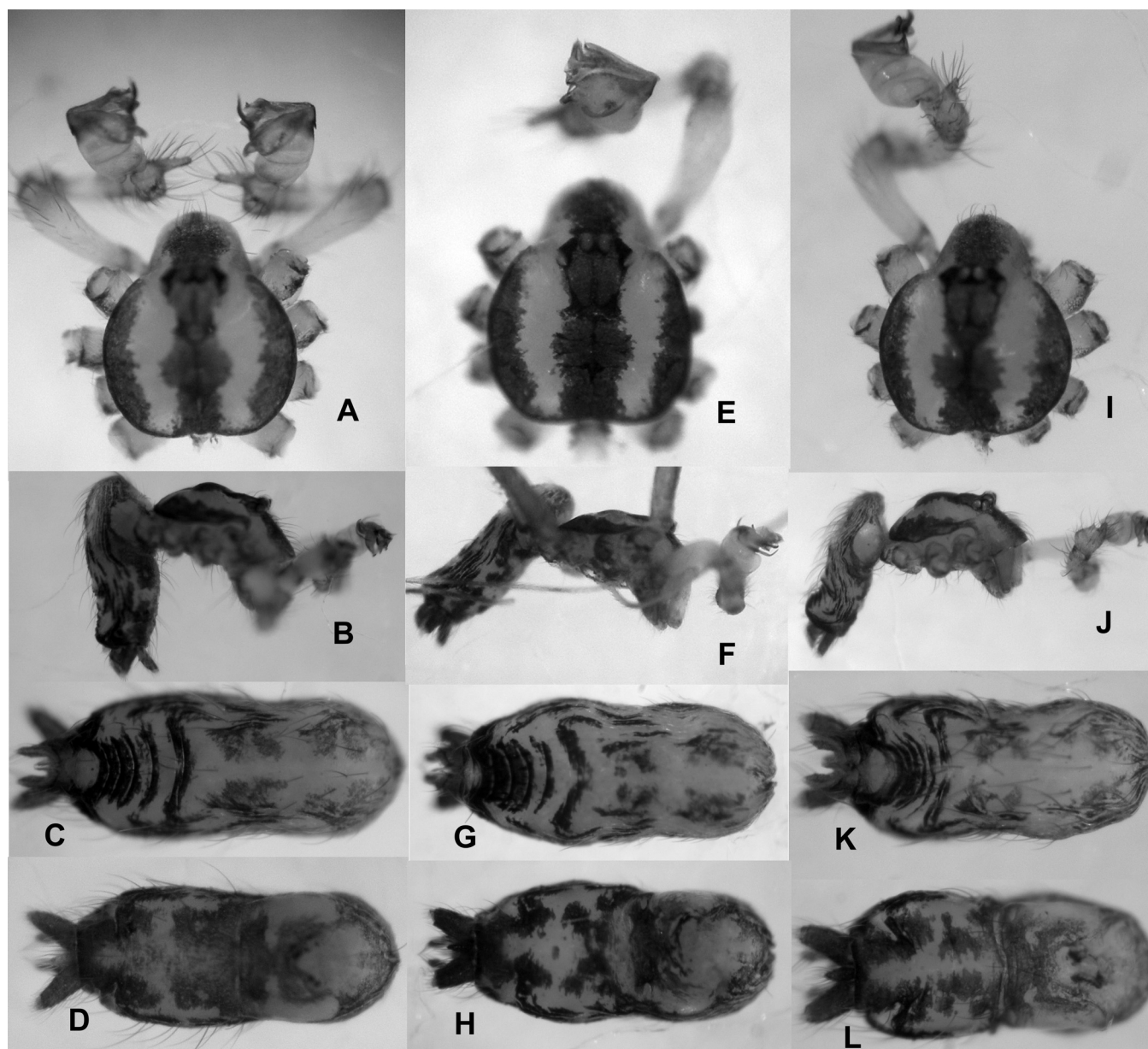


Fig. 1. *Flexicrurum flexicrurum*, new species: A–D; *Flexicrurum longispina*, new species: E–H; *Flexicrurum minutum*, new species: I–L. A, E, F, carapace of male; B, F, J, male in lateral view; C, G, K, abdomen of male in dorsal view; D, H, L, abdomen of male in ventral view.

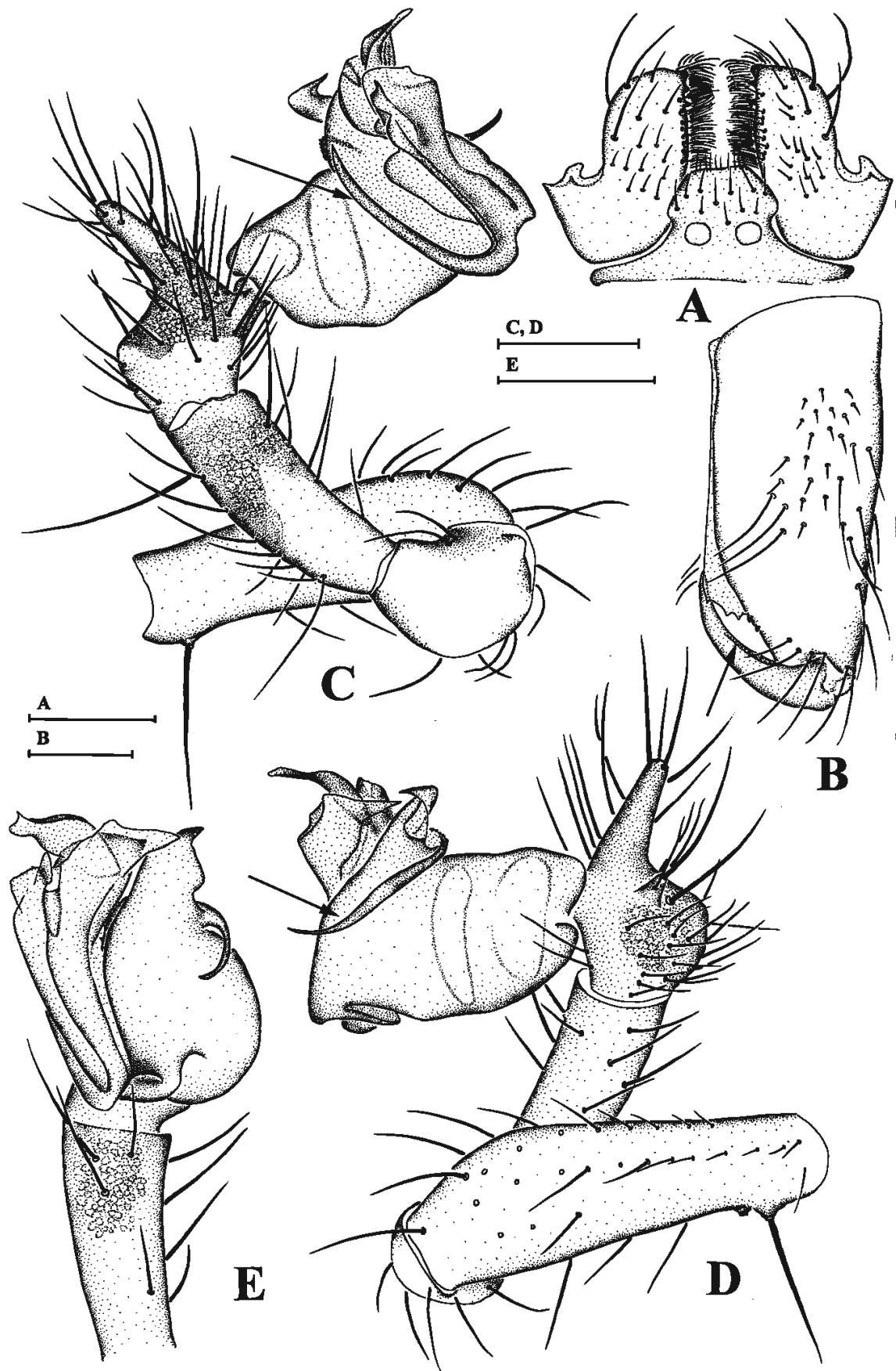


Fig. 2. *Flexicrurum flexicrurum*, new species: A, maxillae and labium, anterior view; B, chelicerae, posterior view (the arrow refers to the small denticles); C, left palp, retrolateral view (the arrow refers to the embolus); D, left palp, prolateral view (the arrow refers to the bulbous apophysis); E, left palpal bulb, dorsal view. Scale bars: A, C–E = 0.2 mm, B = 0.1 mm.

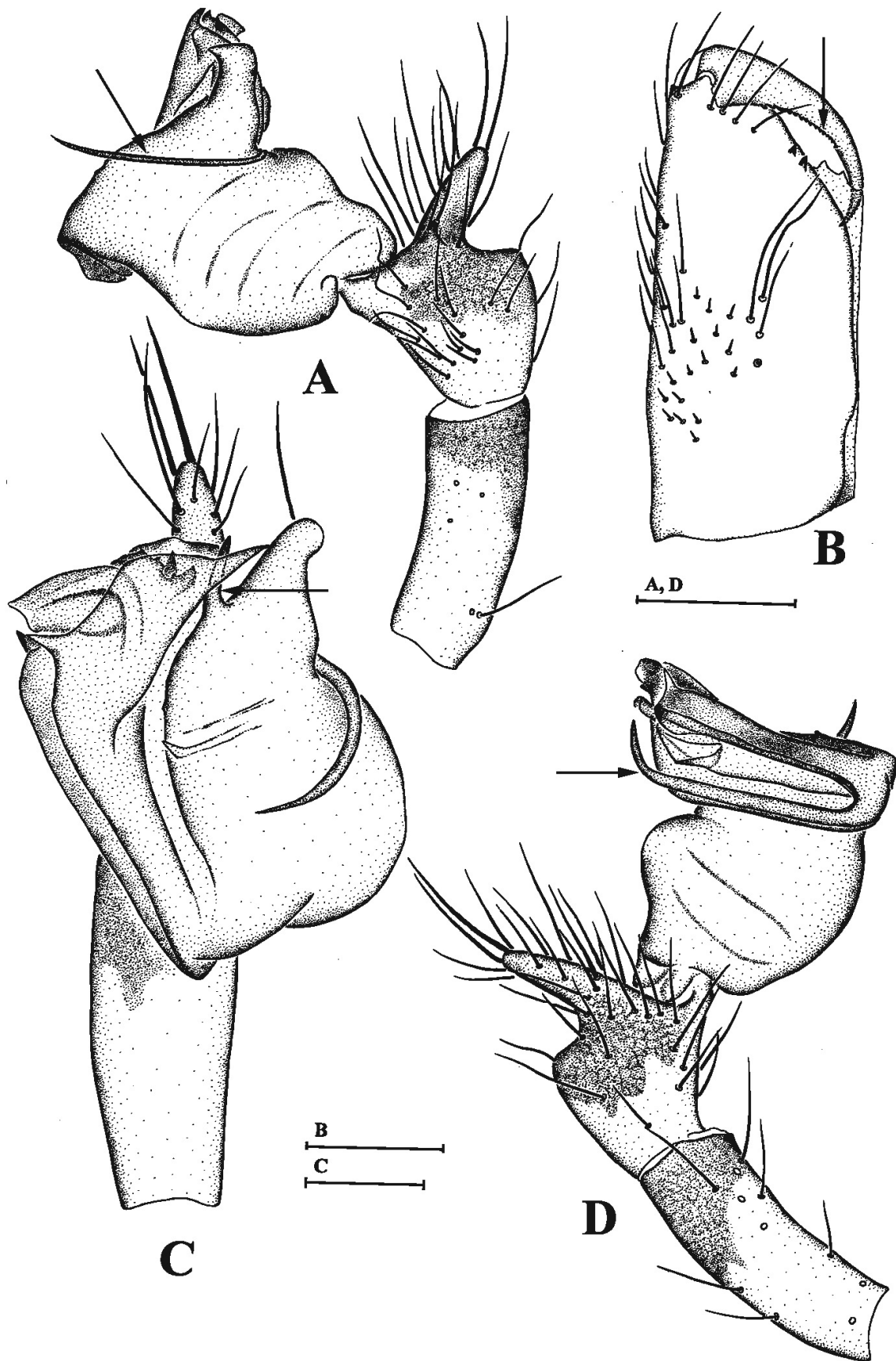


Fig. 3. *Flexicrurum longispina*, new species: A, left palp, prolateral view (the arrow refers to the bulbal apophysis); B, chelicerae, posterior view (the arrow refers to the small denticles); C, left palpal bulb, dorsal view (the arrow refers to the long spine on bulbal latero-dorsal surface); D, left palp, retrolateral view (the arrow refers to the embolus). Scale bars: A, D = 0.2 mm, B, C = 0.1 mm.

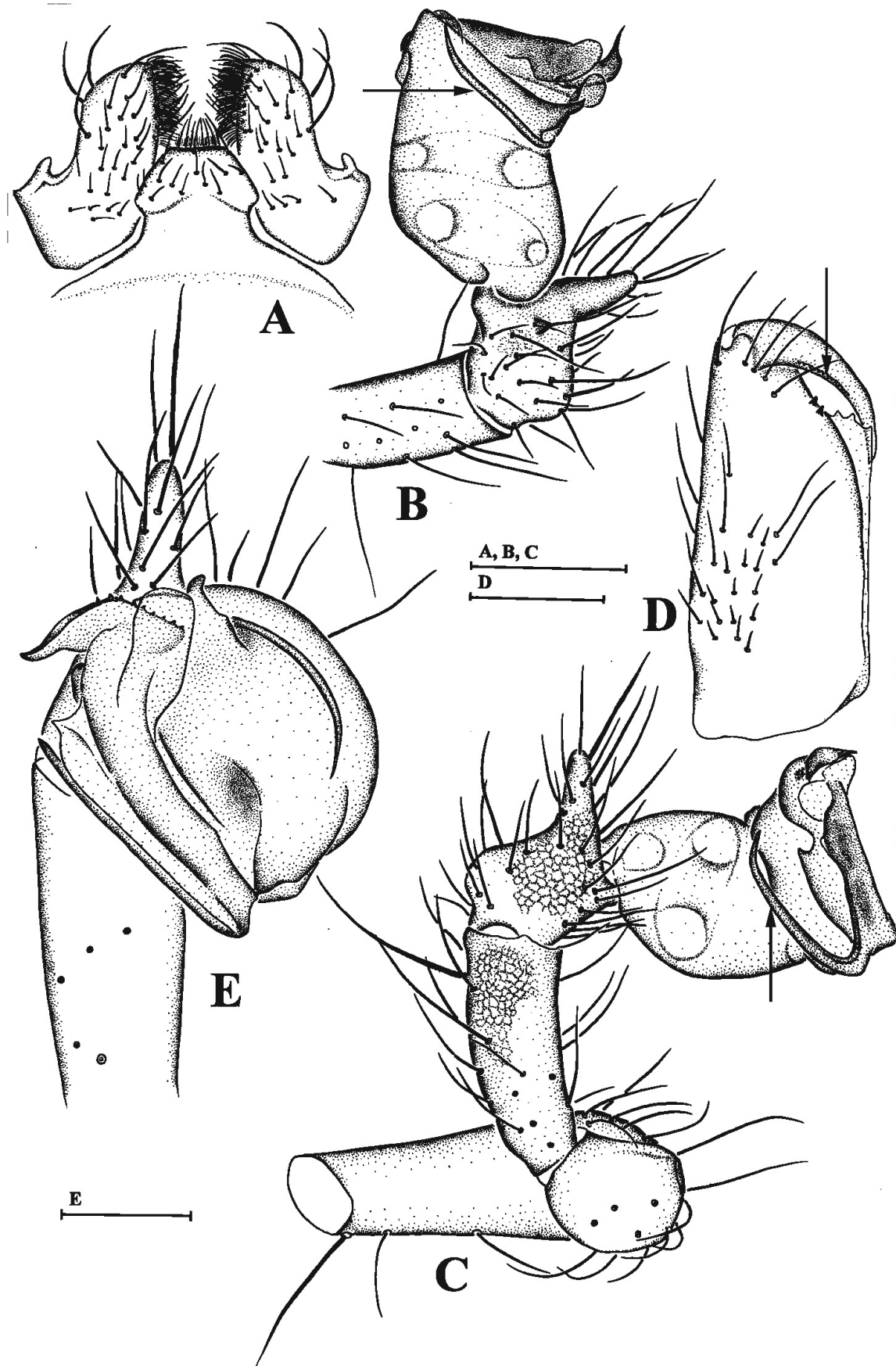


Fig. 4. *Flexicrurum minutum*, new species: A, maxillae and labium, anterior view; B, left palp, prolateral view (the arrow refers to the bulbal apophysis); C, left palp, retrolateral view (the arrow refers to the embolus); D, chelicerae, posterior view (the arrow refers to the small denticles); E, left palpal bulb, dorsal view. Scale bars: A–C = 0.2 mm, D, E = 0.1 mm.

2.28, 2.10, 0.96); II 5.71 (1.58, 0.25, 1.65, 1.53, 0.70); III 4.53 (1.31, 0.23, 1.21, 1.21, 0.57); IV 6.92 (1.93, 0.23, 2.03, 1.98, 0.75). Leg formula: 1 4 2 3. Palp measurements: 1.14 (0.50, 0.18, 0.30, 0.16), bulb 0.33 long. Palpal femur, patella and tibia modified as *F. flexicrurum*, new species. Tibia and tarsus light pigmented. Tarsus with a strong lateral protrusion. Bulb with a slender apophysis. Conductor complicated.

Female: Unknown.

Etymology. – The specific name is from the Greece “*minutus* = small”, refers to the relatively smaller body and shorter legs than the other species of the genus.

Ouette Saaristo, 1998

Ouette Saaristo, 1998: 22 (type species: *Ouette ouette* Saaristo, 1998).

Ouette gyrus, new species (Figs. 5A–H, 10)

Material examined. – Holotype: male (IZCAS), Yalong Cave (18°59'N 108°53'E), Yalong Village, Donghe Town, Dongfang City, Hainan Island, China, coll. Y. Song, X. Han, and Y. Tong, 1 Apr.2005.

Paratypes: 4 males and 17 females (IZCAS), same data as holotype.

Diagnosis. – The new species is similar in male palp to the species of the genus *Speocera*, but the posteriorly shifted copulatory openings (from the epigastric furrow) suggested that it is a member of the genus *Ouette*, and it can be distinguished from *O. ouette* Saaristo, 1998, by the different shapes of chitinous ducts.

Description. – Males: Total length 0.86–0.94. Carapace 0.48–0.51 long, 0.40–0.42 wide; abdomen 0.37–0.48 long, 0.28–0.33 wide. The whole body pale. Pattern of carapace as the female, but paler. Sternum without radiating streaks, abdomen nearly white. Chelicerae slightly compressed antero-posteriorly. Chaetotaxy: tibia III with 1 strong prolateral and 2 small retrolateral spines, tibia IV with 2 prolateral and 3–4 retrolateral spines, metatarsus IV with 1 prolateral and 2 retrolateral spines. Leg measurements: I 1.83 (0.56, 0.15, 0.52, 0.36, 0.24); II 1.65 (0.51, 0.15, 0.44, 0.32, 0.23); III 1.43 (0.42, 0.14, 0.35, 0.31, 0.21); IV 1.94 (0.58, 0.14, 0.56, 0.41, 0.25). Leg formula: 4 1 2 3. Palp measurements: 0.61 (0.21, 0.09, 0.15, 0.16), bulb 0.13 long, 0.15 wide. Palpal tibia incrassate, as long as tarsi, the latter tip obtusely.

Females: Total length 1.01–1.06. Carapace 0.50–0.52 long, 0.40–0.42 wide; abdomen 0.52–0.62 long, 0.40–0.44 wide. Body color pale yellow, darker than the male. Abdomen brown violet, with streaks on posterior and lateral area. Chelicerae unmodified. Leg measurements: I 1.74 (0.52, 0.15, 0.50, 0.34, 0.23); II 1.59 (0.46, 0.15, 0.43, 0.32, 0.23); III 1.37 (0.40, 0.12, 0.33, 0.31, 0.21); IV 1.91 (0.56, 0.15, 0.53,

0.42, 0.25). Leg formula: 4 1 2 3. Palp measurements: 0.45 (0.15, 0.07, 0.11, 0.12). Chitinous ducts strongly curved backward from the epigastric furrow.

Etymology. – The specific name is from the Latin “*gyrus* = ring”, and refers to the shape of chitinous ducts of female.

Speocera Berland, 1914

Speocera Berland, 1914: 89 (type species: *Speocera pallida* Berland, 1914).

Speocera asymmetrica, new species (Figs. 6A–H, 10)

Material examined. – Holotype: male (IZCAS), a cave (unnamed) in mango farm (19°05'N 109°03'E), Baoyou Village, Qicha Town, Changjiang County, Hainan Island, China, coll. Y. Song, X. Han, G. Deng, and Y. Tong, 3 Apr.2005.

Paratypes: 3 males and 13 females (IZCAS), same data as holotype; 1 male (IZCAS), Bawangling National Natural Reserve (19°04'N 109°08'E), Changjiang County, Hainan Island, China, coll. Y. Song, X. Han, G. Deng, and Y. Tong, 22 Mar.2005.

Diagnosis. – The new species is similar to *S. krikkeni* Brignoli, 1977, but can be distinguished by the modified chelicerae, the relatively slender palpal tibia, the different shapes of bulb, the spineless legs, and the distinctly longer chitinous ducts.

Description. – Males: Total length 1.12. Carapace 0.52–0.54 long, 0.41–0.42 wide; abdomen 0.54–0.60 long, 0.40–0.44 wide. Pattern of carapace as the female, but paler. Borders of sternum and abdomen pale violet. Chelicerae laterally excavated. Legs spineless, metatarsus IV distal part straight, with 3 pairs of setae ventrally. Legs measurements: I 1.98 (0.62, 0.13, 0.60, 0.38, 0.25); II 1.75 (0.52, 0.13, 0.51, 0.35, 0.24); III 1.44 (0.44, 0.13, 0.37, 0.32, 0.18); IV 2.07 (0.60, 0.15, 0.58, 0.45, 0.29). Leg formula: 4 1 2 3. Palp measurements: 0.85 (0.32, 0.11, 0.23, 0.19), bulb 0.12 long, 0.17 wide. Palpal tibia slightly incrassate, longer than tarsus, the latter obtuse. Bulb asymmetrical, with short appendage.

Females: Total length 1.02–1.12. Carapace 0.52–0.54 long, 0.43–0.44 wide; abdomen 0.62–0.56 long, 0.33–0.42 wide. Pattern of carapace more distinct than the male. Sternum and abdomen brown violet. Some specimens with streaks on posterior and lateral area of abdomen. Chelicerae unmodified. Leg measurements: I 1.76 (0.52, 0.16, 0.50, 0.34, 0.24); II 1.63 (0.49, 0.16, 0.43, 0.31, 0.24); III 1.40 (0.43, 0.12, 0.33, 0.30, 0.22); IV 1.94 (0.55, 0.16, 0.55, 0.42, 0.26). Leg formula: 4 1 2 3. Palp measurements: 0.50 (0.16, 0.08, 0.12, 0.14). Chitinous ducts very long, nearly converged on abdominal dorsal surface.

Etymology. – The specific name is from the Greece “*symmetricus*”, and combined with the prefix “*a*”, refers to the asymmetrical bulb of male.

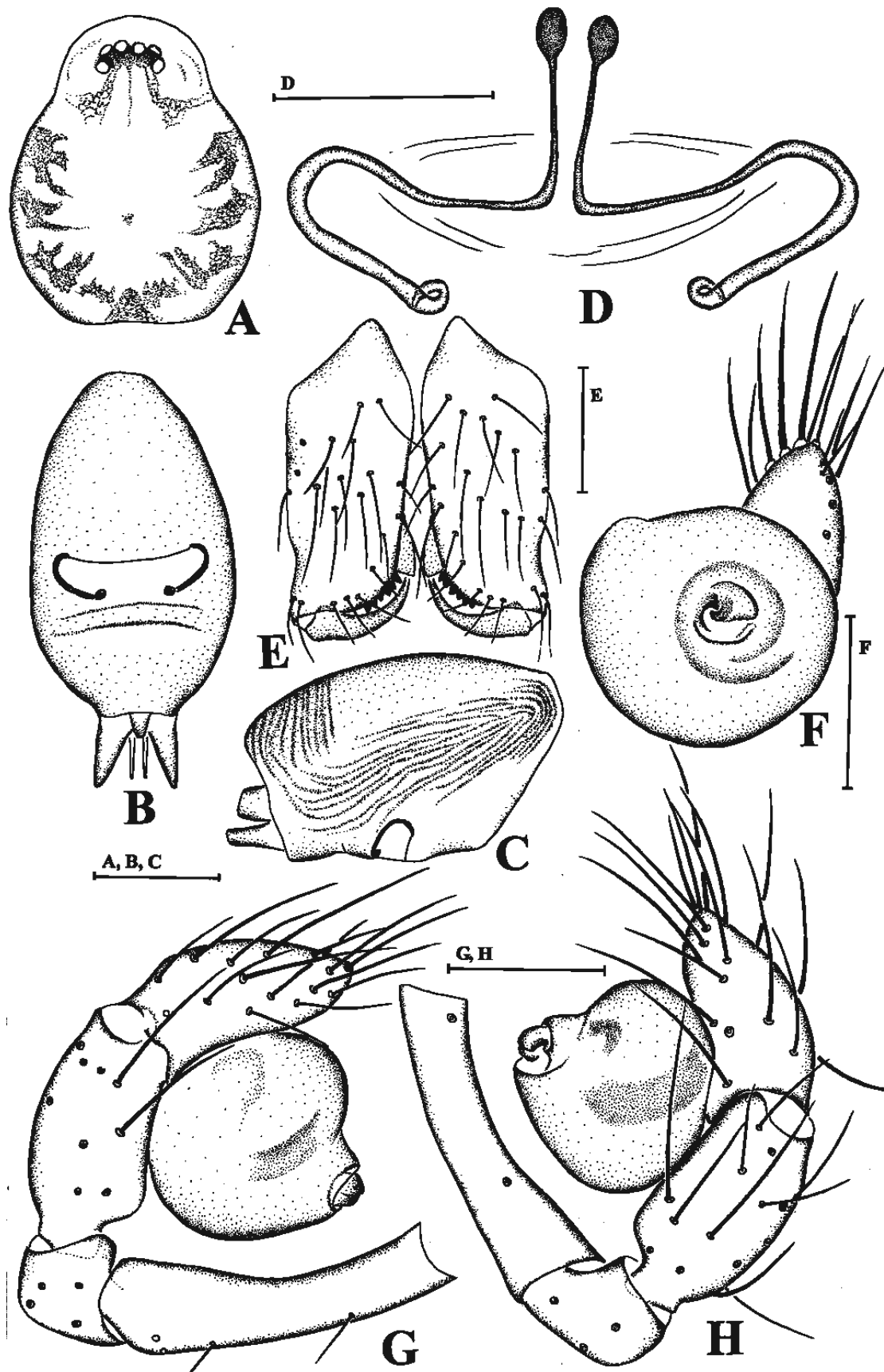


Fig. 5. *Ovette gyrus*, new species: A, carapace of female, dorsal view; B, abdomen of female, ventral view; C, abdomen of female, lateral view; D, vulva, dorsal view; E, chelicerae of male, anterior view; F, bulb, ventral view; G, left palp, prolateral view; H, left palp, retrolateral view. Scale bars: A–C = 0.2 mm, D–H = 0.1 mm.

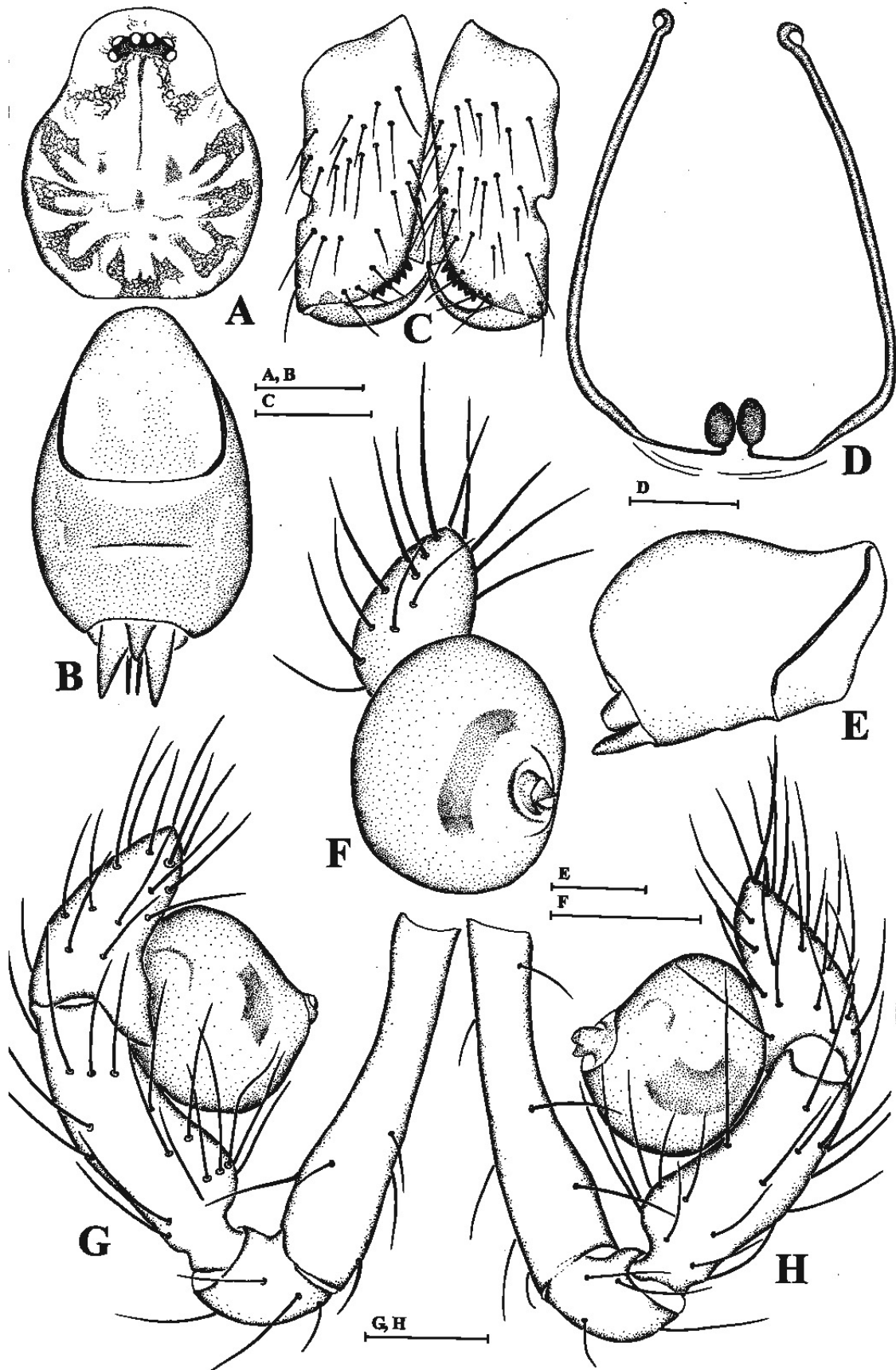


Fig. 6. *Speocera asymmetrica*, new species: A, carapace of female, dorsal view; B, abdomen of female, ventral view; C, chelicerae of male, anterior view; D, vulva, dorsal view; E, abdomen of female, lateral view; F, bulb, ventral view; G, left palp, prolateral view; H, left palp, retrolateral view. Scale bars: A–B = 0.2 mm, C–H = 0.1 mm.

***Speocera bicornea*, new species**

(Figs. 7A–H, 10)

Material examined. – Holotype: male (IZCAS), Mihou Cave (18°56'N 109°04'E), Datian National Natural Reserve, Dongfang City, Hainan Island, China, coll. Y. Song, X. Han, Y. Tong and G. Deng, 28 Mar.2005.

Paratypes: 6 males and 13 females (IZCAS), same data as holotype.

Diagnosis. – The new species is closely related to *S. pongo* Deeleman-Reinhold, 1995, but can be distinguished by the different patterns of carapace, the cone-shaped modification on chelicerae, the different shapes of bulb, the small distal appendage on bulb, and the different details of vulva.

Description. – Males: Total length 1.07–1.16. Carapace 0.53–0.56 long, 0.44–0.46 wide; abdomen 0.55–0.60 long, 0.39–0.44 wide. Pattern of carapace as the female, but paler (nearly absent on one specimen). Sternum without radiating streaks, pale violet in color. Abdomen pale violet, with faintly violet streaks on posterior and lateral area, but nearly invisible in some specimens. Chelicerae laterally excavated, with a pair of cone-shaped prominences. Legs pale yellow. Chaetotaxy: tibia III with 1 prolateral and 3 retrolateral spines, metatarsus III with 1 prolateral and 1 retrolateral spines, tibia IV with 1 strong prolateral and 3 retrolateral spines, metatarsus IV with 2 prolateral spines. Leg measurements: I 2.24 (0.67, 0.18, 0.66, 0.44, 0.29); II 2.03 (0.60, 0.17, 0.57, 0.41, 0.28); III 1.74 (0.50, 0.16, 0.42, 0.38, 0.28); IV 2.33 (0.67, 0.17, 0.67, 0.50, 0.32). Leg formula: 4 1 2 3. Palp measurements: 0.77 (0.29, 0.09, 0.17, 0.22), bulb 0.13 long, 0.16 wide. Palpal tibia slightly incrassate, tarsus longer than tibia, tip acute.

Females: Total length 1.00–1.06. Carapace 0.43–0.44 long, 0.53–0.55 wide; abdomen 0.53–0.56 long, 0.33–0.36 wide. Abdomen violet brown, provided with more distinct streaks than in the male. Chelicerae not modified. Leg measurements: I 1.88 (0.56, 0.16, 0.55, 0.35, 0.26); II 1.70 (0.52, 0.15, 0.45, 0.33, 0.25); III 1.46 (0.43, 0.14, 0.36, 0.31, 0.22); IV 1.99 (0.58, 0.14, 0.56, 0.43, 0.28). Leg formula: 4 1 2 3. Palp measurements: 0.45 (0.11, 0.10, 0.09, 0.15). Vulva with short straight chitinous ducts.

Etymology. – The specific name is from the Greece, “*corne* = horny”, combined with prefix *bi*, in reference to the modifications of chelicerae in male.

***Speocera octodentis*, new species**

(Figs. 8A–E, 10)

Material examined. – Holotype: male (IZCAS), Mountain Wuzhishan (18°49'N 109°39'E), Wuzhishan City, Hainan Island, China, coll. Y. Song, 16 Apr.2005.

Diagnosis. – The new species can be easily recognized from all the other congeneric species by the row of 8 teeth on chelical promargin and the ear-shaped horn on anterior face of chelicerae.

Description. – Male: Total length 0.96. Carapace 0.49 long, 0.42 wide; abdomen 0.51 long, 0.40 wide. Carapace with pattern. Sternum pale violet, without radiating streak. Abdomen pale. Chelicerae laterally excavated, anterior face with a pair of ear-shaped horn. Chelical promargin with row of 8 teeth. Legs pale yellow, spineless. Leg measurements: I 1.89 (0.55, 0.16, 0.54, 0.37, 0.27); II 1.72 (0.51, 0.16, 0.45, 0.34, 0.26); III 1.49 (0.43, 0.15, 0.36, 0.31, 0.24); IV 2.0 (0.57, 0.16, 0.54, 0.43, 0.30). Leg formula: 4 1 2 3. Palp measurements: 0.7 (0.24, 0.09, 0.16, 0.21), bulb 0.17 long, 0.20 wide. Apical bulbal appendage small, tip of tarsus acute.

Female: Unknown.

Etymology. – The specific name is from the Latin “*octo* = eight, and *dens* = teeth”, and refers to the row of eight promarginal teeth on male chelicerae.

***Speocera songae*, new species**

(Figs. 9A–D, 10)

Material examined. – Holotype: female (IZCAS), Luobi Cave (18°20'N 109°33'E), Lizhigou Town, Sanya City, Hainan Island, China, coll. Y. Song, 10–11 Apr.2005.

Paratypes: 6 females (IZCAS), same data as holotype.

Diagnosis. – The new species is similar to the female of *S. leclerci* Deeleman-Reinhold, 1995, but can be distinguished by the presence of eyes, the straight metatarsus IV, and the larger body size.

Remarks. – Most genera of Ochyroceratidae are frequently met in caves, yet most of them do not show any morphological adaptations. The pale body color and especially the long legs of this new species are typical morphological adaptation to cave environment.

Description. – Females: Total length 1.36–1.39. Carapace 0.59–0.62 long, 0.46–0.48 wide; abdomen 0.76–0.80 long, 0.53–0.58 wide. Carapace pale yellow without pattern, only near the eyes with some pigment, but nearly absent in one specimen. Sternum, abdomen and legs pale yellow. Chelicerae unmodified. Legs spineless, metatarsus IV as in *S. leclerci*, distally provided with three pairs of small strong setae ventrally, but straight. Leg measurements: I 3.43 (1.02, 0.19, 1.09, 0.78, 0.35); II 3.15 (0.98, 0.18, 0.94, 0.70, 0.35); III 2.70 (0.82, 0.19, 0.73, 0.64, 0.32); IV 3.53 (1.08, 0.19, 1.05, 0.85, 0.36). Leg formula: 4 1 2 3. Palp measurements: 0.62 (0.20, 0.09, 0.15, 0.18). Chitinous ducts very long, surrounding the abdomen.

Male: Unknown.

Etymology. – The species is named after the collector Mrs. Yanjing Song (Y. Song, IZCAS).

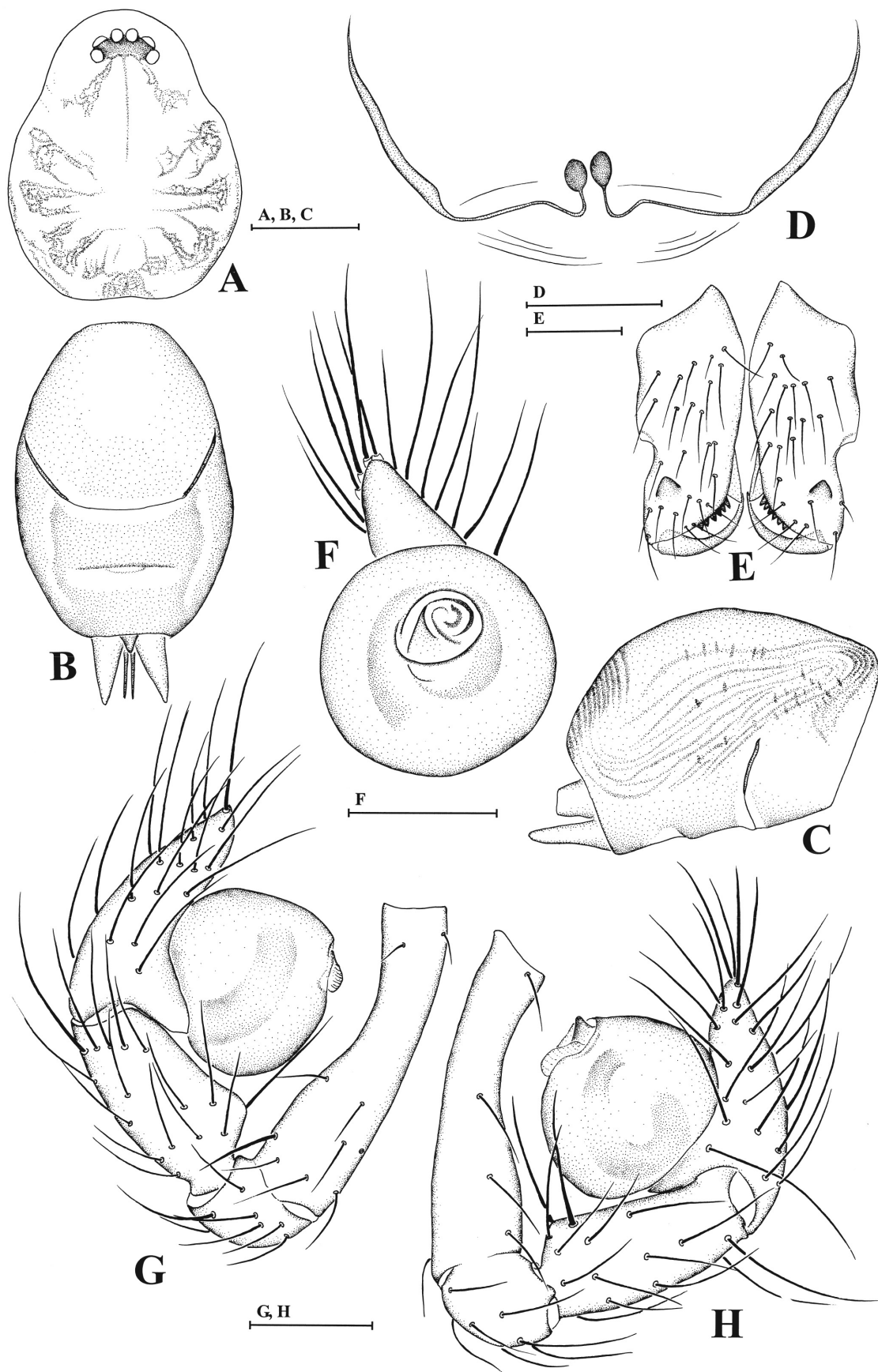


Fig. 7. *Speocera bicornea*, new species: A, carapace of female, dorsal view; B, abdomen of female, ventral view; C, abdomen of female, lateral view; D, vulva, dorsal view; E, chelicerae of male, anterior view; F, bulb, ventral view; G, left palp, prolateral view; H, left palp, retrolateral view. Scale bars: A–C = 0.2 mm, D–H = 0.1 mm.

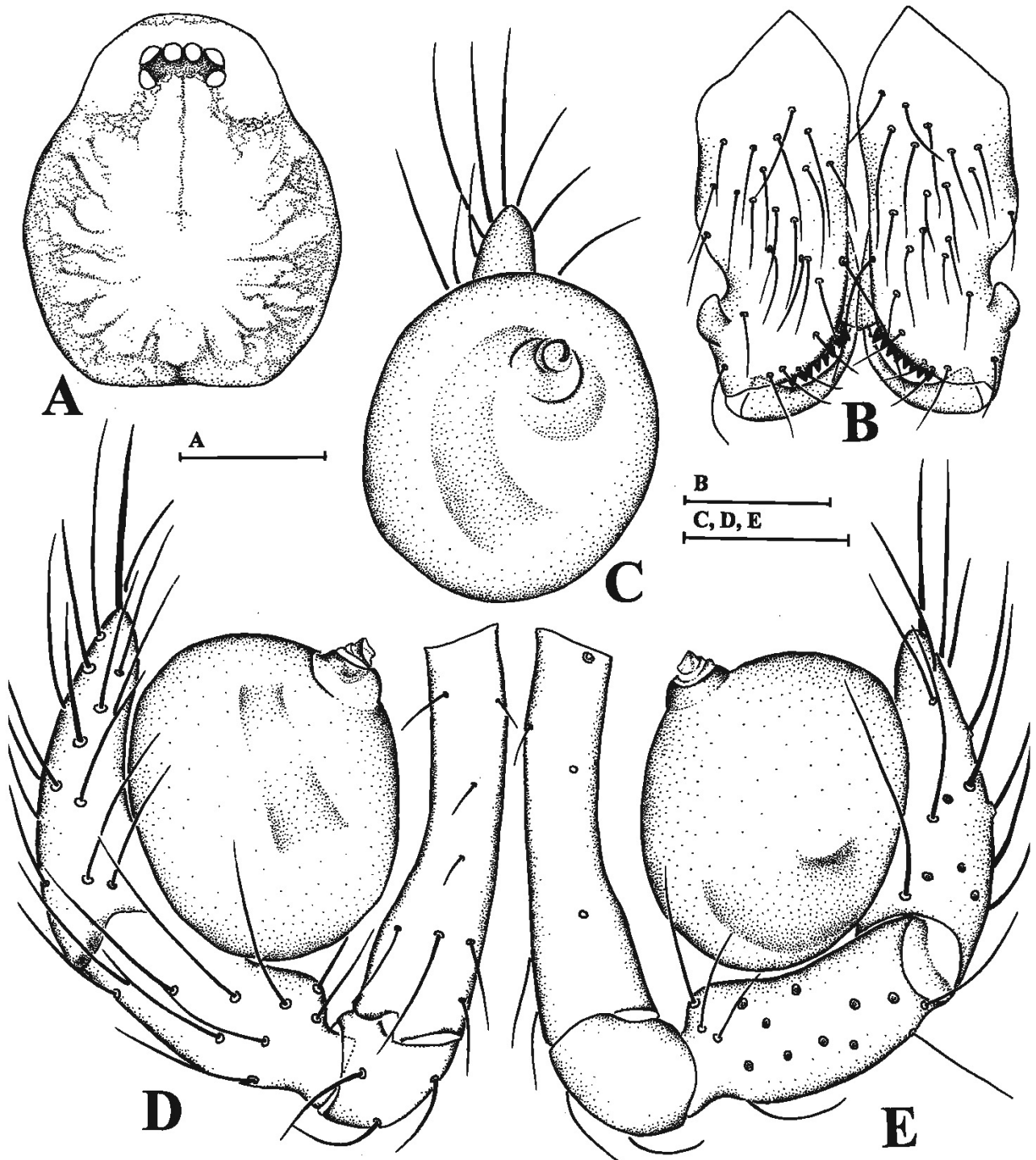


Fig. 8. *Speocera octodentis*, new species: A, carapace of male, dorsal view; B, chelicerae of male, anterior view; C, bulb, ventral view; D, left palp, prolateral view; E, left palp, retrolateral view. Scale bars: A = 0.2 mm, B–E = 0.1 mm.

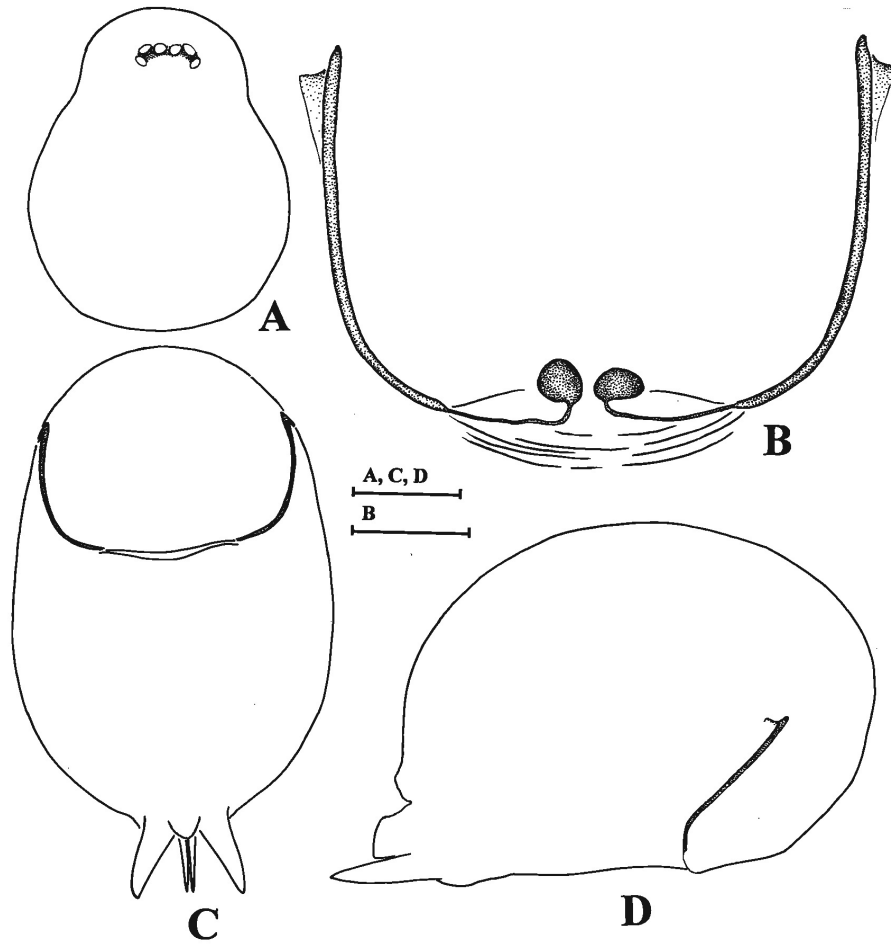


Fig. 9. *Speocera songae*, new species: A, carapace of female, dorsal view; B, vulva, dorsal view; C, abdomen of female, ventral view; D, abdomen of female, lateral view. Scale bars: A, C, D = 0.2 mm, B = 0.1 mm.

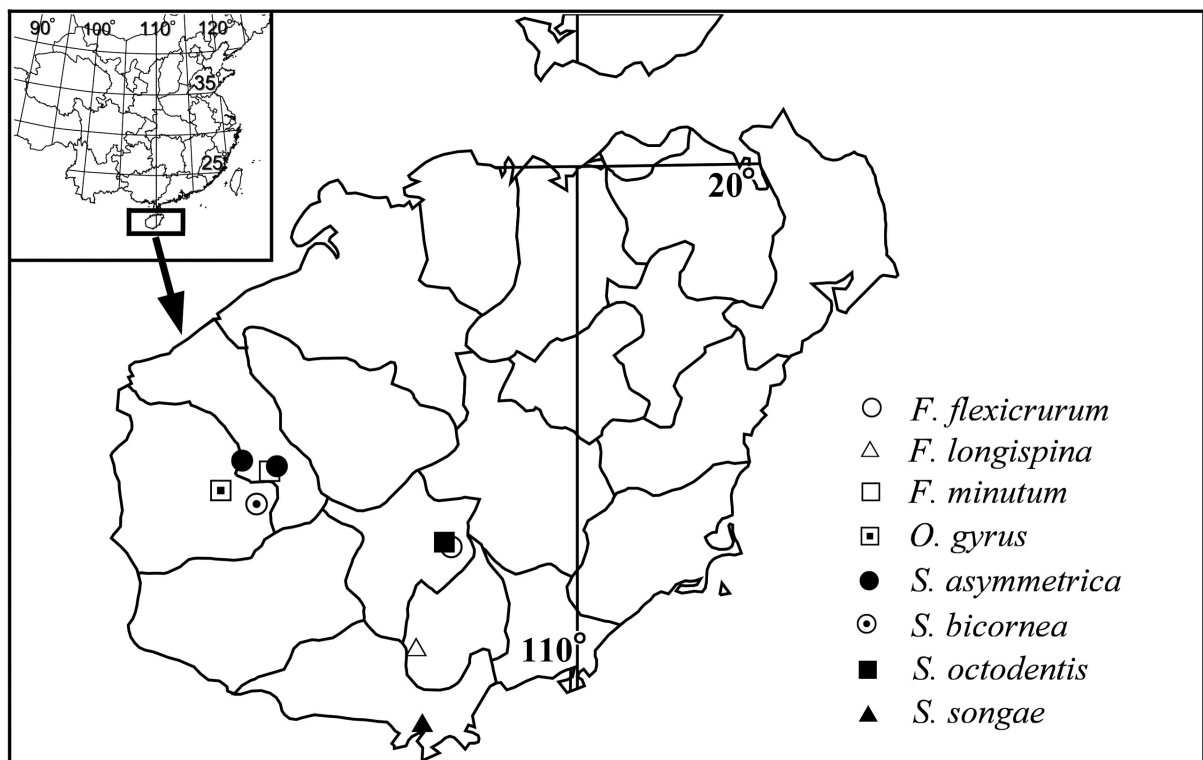


Fig. 10. Collection localities of Chinese Ochyroceratidae.

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