Aetana libjo Huber, 2015

Huber BA, Nuñeza OM, Leh Moi Ung C. 2015. Revision, phylogeny, and microhabitat shifts in the Southeast Asian spider genus *Aetana* (Araneae, Pholcidae). European Journal of Taxonomy 162: 1-78.

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Figs 3–4. Known distributions of the *Aetana ocampoi* (3) and *A. kiukoki* (4) groups.

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Figs 6–12. Live specimens.
8–9. *A. libjo* Huber, sp. nov., ♂ and ♀ from Dinagat Island, Mindanao.

Aetana libjo Huber, sp. nov.
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Figs 8–9, 26–40, 45–47

Diagnosis

Distinguished from the very similar *A. baganihan* Huber, sp. nov. by shapes of bulbal processes (compare Figs 38–39 and 41–42), by shorter male palpal tibia (2.1–2.4 × longer than wide *vs.* 2.9–3.2 in *A. baganihan* Huber, sp. nov.), and by shorter epigynum and wider scape (compare Figs 28 and 43). Distinguished from next closest known relative (*A. ocampoi* Huber, sp. nov.) by light coloration and several details of male palp and epigynum (especially shapes of bulb and scape; Figs 26–28). From all other congeners by simple procursus and complex bulbal processes (Figs 26–27) and by narrow epigynal scape.

Etymology

Named for the type locality; noun in apposition.

Material examined

Holotype

PHILIPPINES: ♂, Dinagat Isl., near Libjo, Paragua Forest, 'site 1' (10.222° N, 125.553° E), 130 m a.s.l., forest at brook, among low vegetation, 20 Feb. 2014 (B.A. Huber), ZFMK (Ar 13929).

Other material

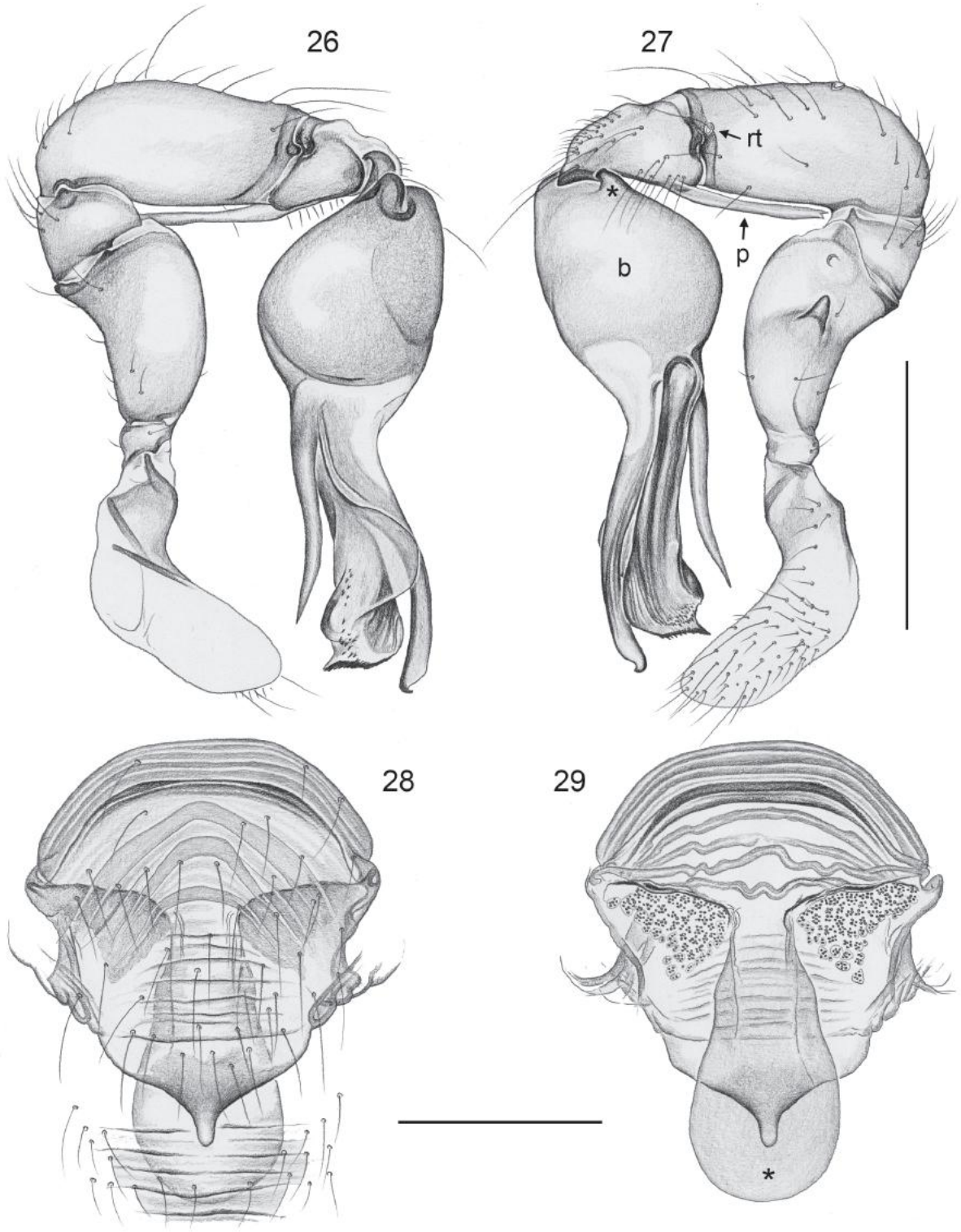
PHILIPPINES: 6 ♂♂, 9 ♀♀, same data as holotype, ZFMK (5♂♂, 8♀♀) (Ar 13930–31) and MSU-IIT (1 ♂, 1 ♀); 3 juveniles in pure ethanol, same data, ZFMK (Phi 231).

Description

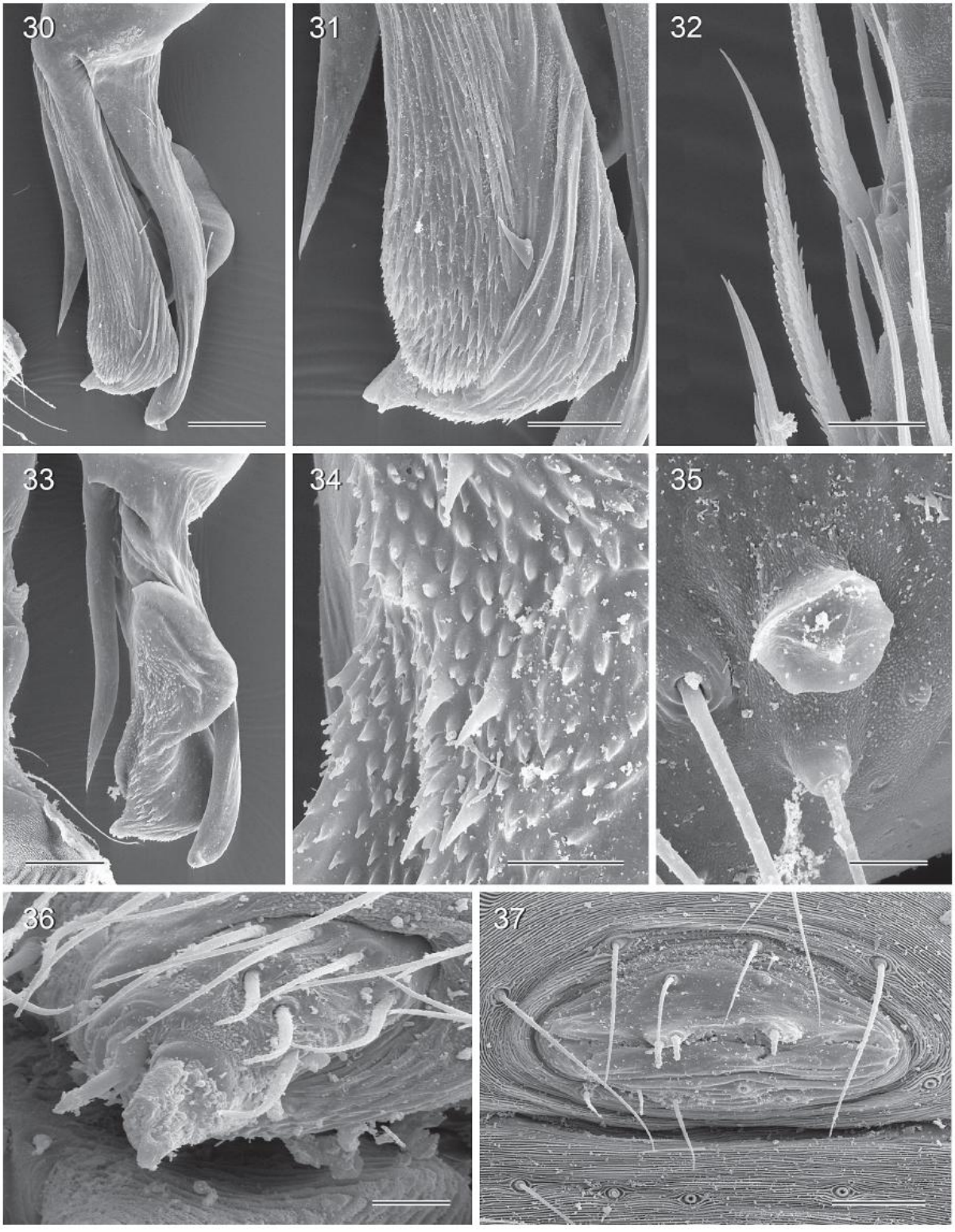
Male (holotype)

Measurements. Total body length 3.1, carapace width 1.1. Leg 1: 37.4 (9.0 + 0.5 + 8.8 + 16.2 + 2.9), tibia 2: 5.1, tibia 3: 3.3, tibia 4: 4.8; tibia 1 L/d: 74. Distance PME-PME 270 µm, diameter PME 125×95 µm, distance PME-ALE 20 µm; AME absent.

Color. Carapace ochre-yellow with black lateral margins, dark mark behind ocular area and dark median mark on posterior rim; ocular area and clypeus pale ochre; sternum bright orange; leg coxae ochre-yellow, other leg segments greenish-ochre (especially femora) to light brown (distal segments); abdomen grey with distinct dorsal and lateral pattern of black marks, ventrally with brown band between gonopore and spinnerets (mid-section indistinct).

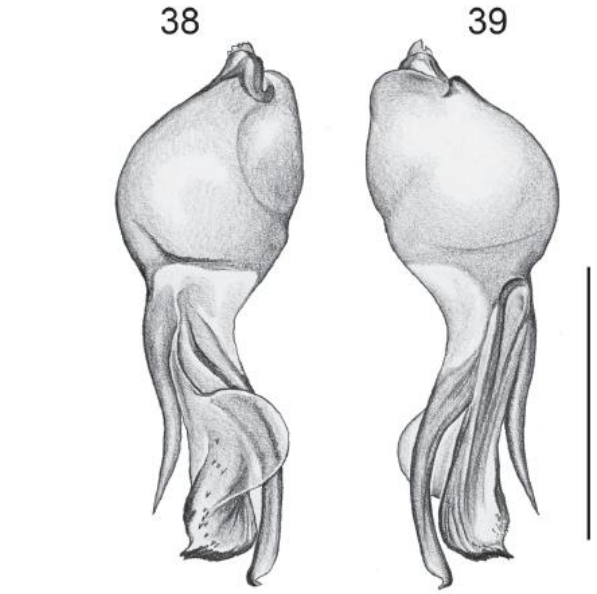


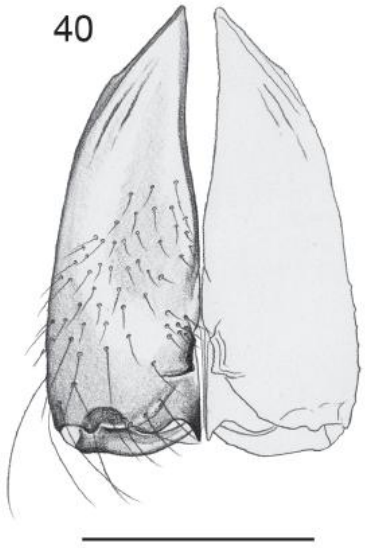
Figs 26–29. *Aetana libjo* Huber, sp. nov. **26–27**. Left male palp, prolateral and retrolateral views (asterisk: retrolateral process of bulb). **28–29**. Cleared female genitalia, ventral and dorsal views (asterisk: median membranous structure). b = genital bulb; p = procursus; rt = retrolateral trichobothrium. Scale lines: 26–27 = 0.5 mm; 28–29 = 0.3 mm.



Figs 30–37. *Aetana libjo* Huber, sp. nov. **30**. Processes of right genital bulb, retrolateral view. **31**. Detail of preceding. **32**. Comb-hairs on female tarsus 4. **33**. Processes of left genital bulb, prolateral view. **34**. Detail of preceding. **35**. Male palpal tarsal organ. **36**. Female ALS. **37**. Male gonopore. Scale lines: 30, 33 = 100 µm; 31, 37 = 40 µm; 32, 34 = 20 µm; 35–36 = 10 µm.

BODY. Habitus as in Fig. 8; ocular area slightly raised, each triad on low hump directed toward lateral; carapace only anteriorly with very shallow and narrow median furrow; clypeus barely modified, indistinct median process near rim provided with some slightly stronger hairs; sternum wider than long (0.70/0.55), unmodified. Gonopore with four epiandrous spigots in two pairs (Fig. 37). ALS as in female (*cf.* Fig. 36).





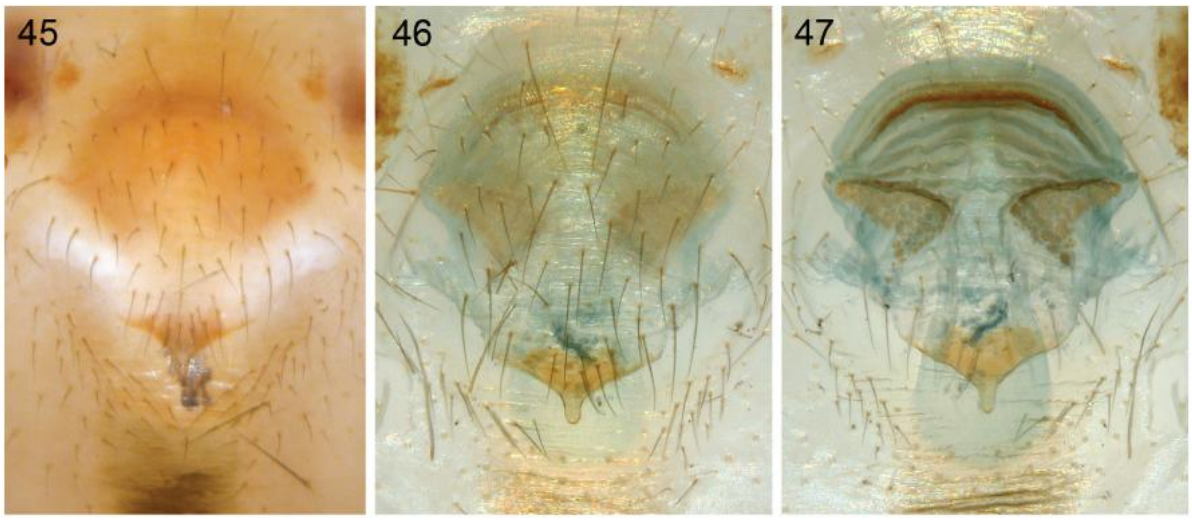
Figs 38–44. — **38–40.** *Aetana libjo* Huber, sp. nov. **38–39**. Left genital bulb in prolateral and retrolateral views. **40**. Male chelicerae, frontal view.

Scale lines: 38–39, 41–44 = 0.5 mm; 40 = 0.3 mm.

CHELICERAE. As in Fig. 40, with pair of ridge-shaped apophyses distally near median line, without proximal lateral apophyses; without modified hairs; without stridulatory ridges.

PALPS. As in Figs 26–27, coxa unmodified, trochanter on retrolateral side with large apophysis fused to femur; femur with small retrolateral process distally; tibia length/width: 0.50/0.22; retrolateral trichobothrium on tibia very distal; tarsus with semitransparent simple procursus directed toward patella; tarsal organ exposed (Fig. 35); genital bulb large, with small retrolateral process proximally and three distinctive processes distally (Figs 30–31, 33, 38–39): dorsal process with distal hook; central hinged process with large prolateral flap and complex tip; ventral hinged process with simple pointed tip. Location of sperm duct opening unknown.

LEGS. Without spines, with curved hairs on metatarsi, with vertical hairs in higher than usual density in one retrolatero-dorsal row on each tibia; retrolateral trichobothrium on tibia 1 at 2%; prolateral trichobothrium absent on tibia 1, present on other tibiae. Tarsus 1 with ~30 pseudosegments, distally distinct. Tarsus 4 comb-hairs with very dense tines (Fig. 32).



Figs 45–50. *Aetana libjo* Huber, sp. nov. (Figs 45–47)
female genitalia; untreated in ventral view, cleared in ventral and dorsal views.

Male (variation)

Tibia 1 in 6 other males: 8.3–9.0 (mean 8.6); ratio of palpal tibia length/width: 2.1–2.4. Some specimens with white marks on abdomen in addition to black marks.

Female

In general similar to male (Fig. 9); eye triads closer together (distance PME-PME 215 μm); clypeus unmodified; tibiae with short vertical hairs in low density; entire median area of carapace darker; clypeus also slightly darker; abdomen with or without white marks; tibia 1 in 9 females: 6.2–7.2 (mean 6.7). Epigynum with large, weakly sclerotized area, posteriorly protruding with short, narrow scape (Figs 28, 45–46); internal genitalia with large median membranous structure of unknown function (Fig. 29).

Natural history

The spiders were found in strongly domed webs among the vegetation. When disturbed, they ran a short distance in the dome, vibrated vigorously for a short time, and then made slow circular movements with their abdomen. Males and females were often found close to each other, but always in separate webs. The locality is shared with the ground-dwelling *A. paragua* Huber, sp. nov.

Distribution

Known from type locality only (Fig. 3).