Aetana gaya 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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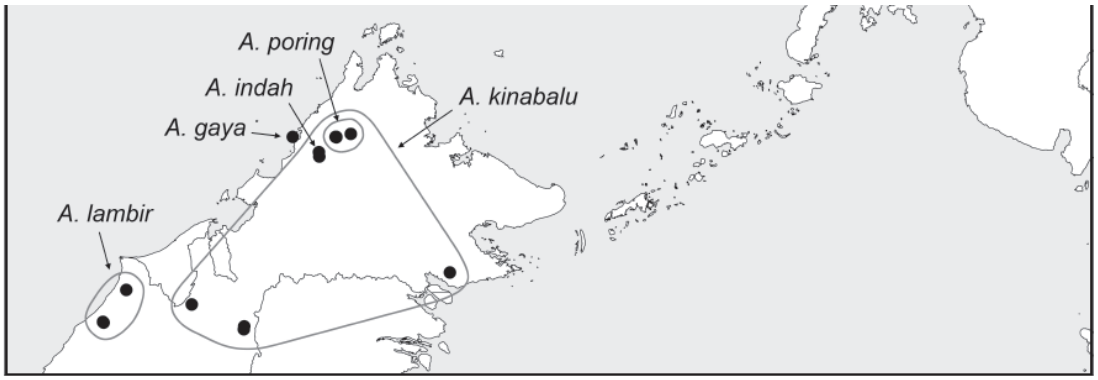

Fig. 5. Known distributions of the *Aetana kinabalu* (Borneo) and *A. omayan* (Philippines) groups.

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104. *A. gaya* Huber, sp. nov., ♂ from Gaya Island, Sabah.

Aetana gaya Huber, sp. nov.
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Figs 104, 126–144, 169–171

Diagnosis

Distinguished from closest known relatives (*A. kinabalu*, *A. lambir* Huber, sp. nov., *A. indah* Huber, sp. nov., *A. poring* Huber, sp. nov.) by shape of prolatero-ventral apophysis of male palpal femur (Fig. 126; single pointed process without side branch); also by apophysis on male palpal trochanter (longer and more sclerotized than in *A. kinabalu* and *A. lambir* Huber, sp. nov.; shorter than in *A. indah* Huber, sp. nov. and *A. poring* Huber, sp. nov.), by shapes of sclerites on procursus (Figs 126–127), and by female genitalia (Figs 128–129, 169–171; short and wide epigynum with straight posterior margin; distinctive internal structures).

Etymology

Named for the type locality; noun in apposition.

Material examined

Holotype

MALAYSIA-BORNEO: ♂, Sabah, Gaya Island, forest along small stream (6.014–6.018° N, 116.020° E), 30–80 m a.s.l., among rocks and tree buttresses, 4 Aug. 2014 (B.A. Huber, S.B. Huber), ZFMK (Ar 13974).

Other material

MALAYSIA-BORNEO: Sabah, 12 ♂♂, 13 ♀♀, 3 juvs, same data as holotype, ZFMK (11 ♂♂, 12 ♀♀; Ar 13975-76) and SMK (1 ♂, 1 ♀); same data, 7 ♀♀, 2 juvs, in pure ethanol, ZFMK (Bor 165).

Description

Male (holotype)

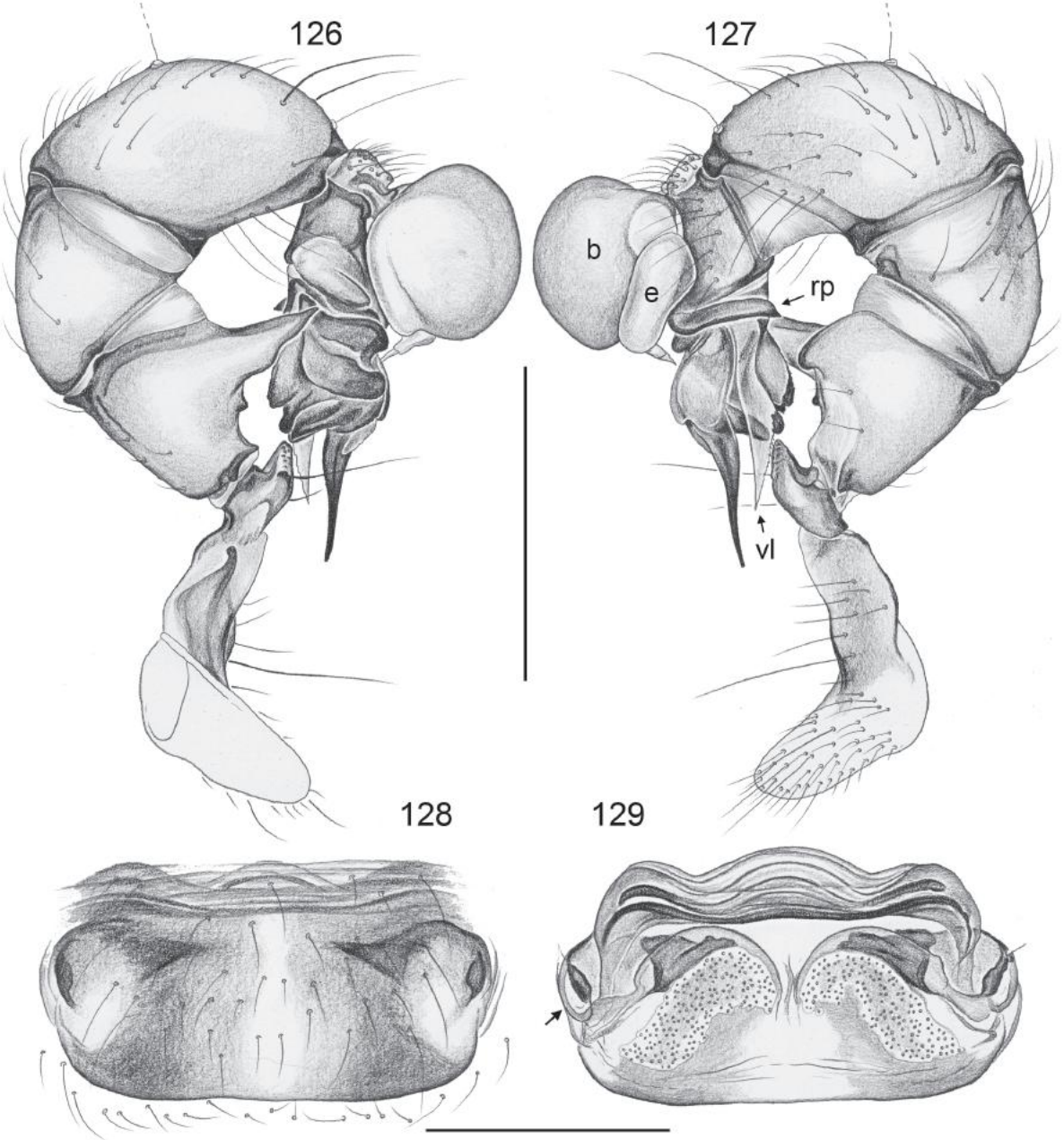
Measurements. Total body length 2.5, carapace width 0.9. Leg 1: 32.6 (7.6 + 0.4 + 7.6 + 14.2 + 2.8), tibia 2: 4.4, tibia 3: 2.8, tibia 4: 4.2; tibia 1 L/d: 96. Distance PME-PME 370 µm, diameter PME 105 µm, distance PME-ALE 25 µm; AME absent.

Color. Carapace pale ochre with black lateral bands and wide brown median band including ocular area. Clypeus pale ochre with pair of brown marks at rim. Sternum medially ochre, laterally slightly darker. Legs ochre to light brown, indistinct darker rings on femora (subdistally) and tibiae (proximally and subdistally); tips of femora and tibiae whitish. Abdomen grey with dorsal and lateral pattern of black and white marks; ventrally with small brown marks near spinnerets and in genital area.

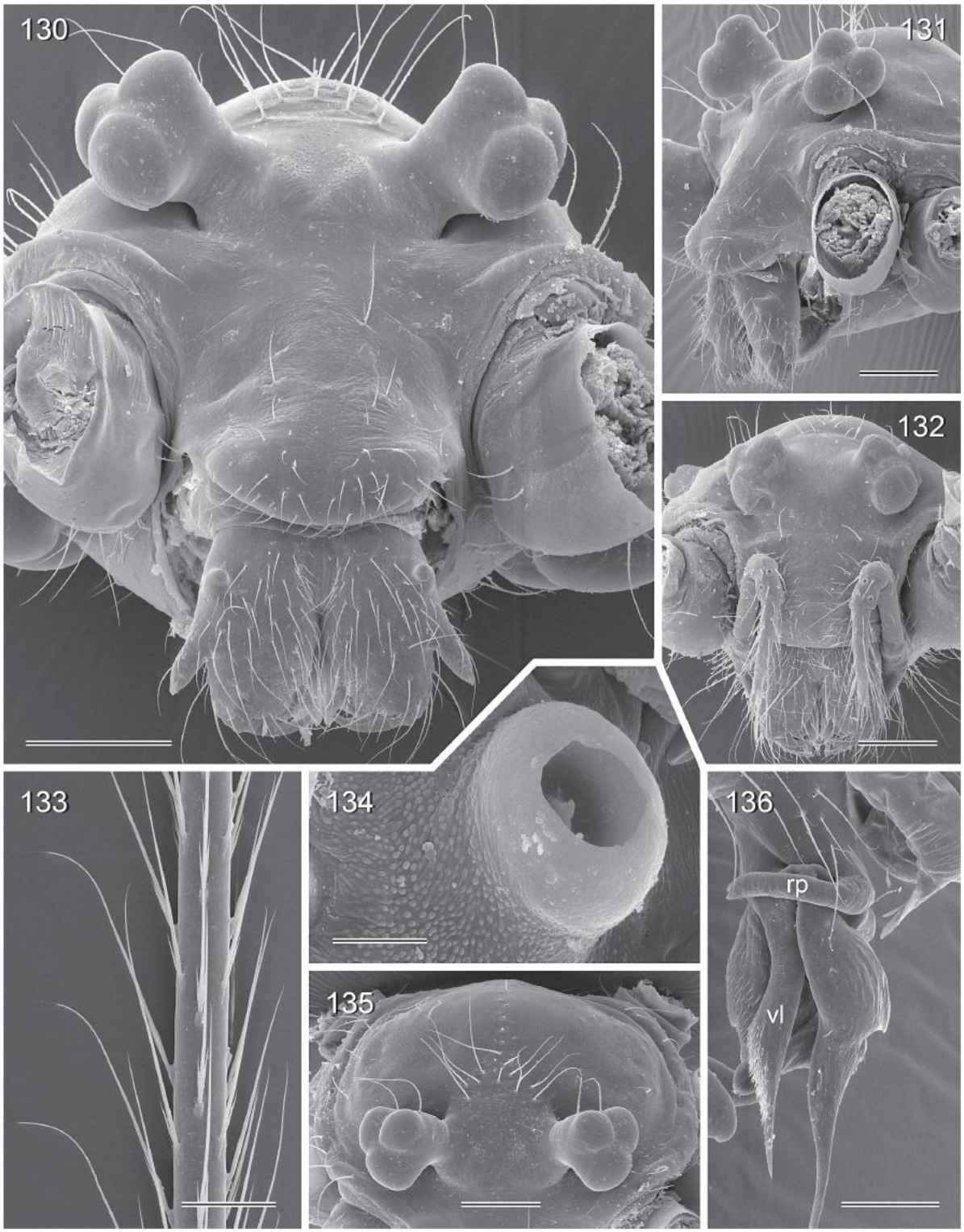
Body. Habitus as in Fig. 104; ocular area slightly raised, each triad on short stalk directed toward lateral (Figs 130–131); carapace without thoracic furrow (Fig. 135; only dark line in anterior part); clypeus slightly more protruding than usual; sternum wider than long (0.75/0.55), unmodified. Gonopore with four epiandrous spigots (Fig. 143). Spinnerets as in Figs 141–142.

Chelicerae. As in *A. lambir* Huber, sp. nov. (*cf.* Fig. 115), with pair of proximal lateral apophyses and pair of simple distal apophyses in very lateral position; without modified hairs; without stridulatory ridges.

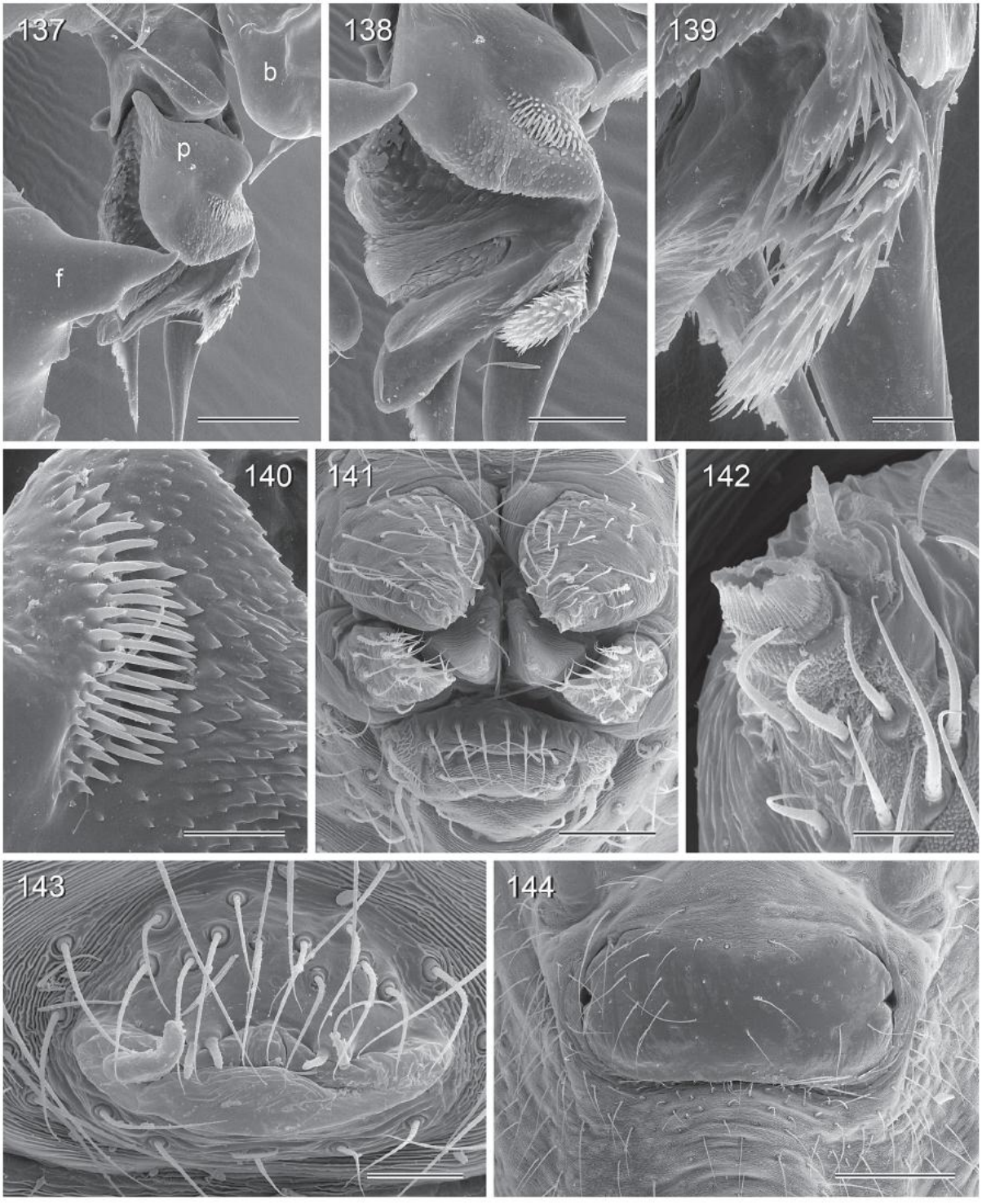
Palps. As in Figs 126–127, coxa unmodified; trochanter with short ventral apophysis with small teeth prolaterally and small prolateral branch; femur with rounded retrolatero-ventral apophysis, long pointed prolatero-ventral apophysis without side branch, with small ventral process. Tarsal organ capsulate (Fig. 134). Procursus complex (Figs 137–140); retrolatero-ventral process with simple tip (Fig. 136). Bulb simple, with short and wide embolus.



Figs 126–129. *Aetana gaya* Huber, sp. nov. **126–127**. Left male palp, prolateral and retrolateral views. **128–129**. Cleared female genitalia, ventral and dorsal views (arrow points at membranous pocket). b = genital bulb; e = embolus; rp = retrolatero-ventral pr
ɑ; 128–129 = 0.3 mm.



Figs 130–136. *Aetana gaya* Huber, sp. nov. **130–131**. Male prosoma, frontal and oblique frontal views. **132**. Female prosoma, frontal view. **133**. Detail of male metatarsus 1. **134**. Male palpal tarsal organ. **135**. Male carapace and ocular area. **136**. Right procursus, retrolateral view. rp = retrolatero-ventral process; vl = ventral lamina. Scale lines: 130–132, 135 = 200 μm; 133 = 80 μm; 134 = 8 μm; 136 = 100 μm.



Figs 137–144. *Aetana gaya* Huber, sp. nov. **137**. Left procursus, prolateral view. **138–140**. Details of preceding. **141**. Male spinnerets. **142**. Male ALS. **143**. Male gonopore. **144**. Epigynum. b = genital bulb; f = femur; p = procursus. Scale lines: 137 = 100 µm; 138, 141 = 60 µm; 139–140 = 20 µm; 142 = 10 µm; 143 = 30 µm; 144 = 200 µm.

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Legs. Without spines, with curved hairs dorsally on metatarsi 1 and 2 only (mostly on proximal half), with few vertical hairs; retrolateral trichobothrium on tibia 1 at 2.5%; prolateral trichobothrium absent on tibia 1, present on other tibiae. Tarsus 1 with ~30 pseudosegments, distally fairly distinct.

Male (variation)
Tibia 1 in 10 other males: 7.2–8.1 (mean 7.6).

Female
In general similar to male; eye triads closer together (distance PME-PME 185 µm), not on stalks (Fig. 132); clypeus less protruding; no curved hairs on metatarsi. Tibia 1 in 11 females: 4.9–5.8 (mean 5.3). Epigynum short and wide plate (Fig. 144), slightly protruding, with pair of distinctive curved darker marks (Figs 128, 169). Internal genitalia as in Figs 129 and 171, with sclerotized structures but apparently without sclerotized pockets, with pair of lateral membranous pockets.

Natural history

Most specimens were found close to the ground among logs, but some (mostly juveniles) built their webs in less protected places higher on trees.

Distribution

Known from Gaya Island only (Fig. 5).

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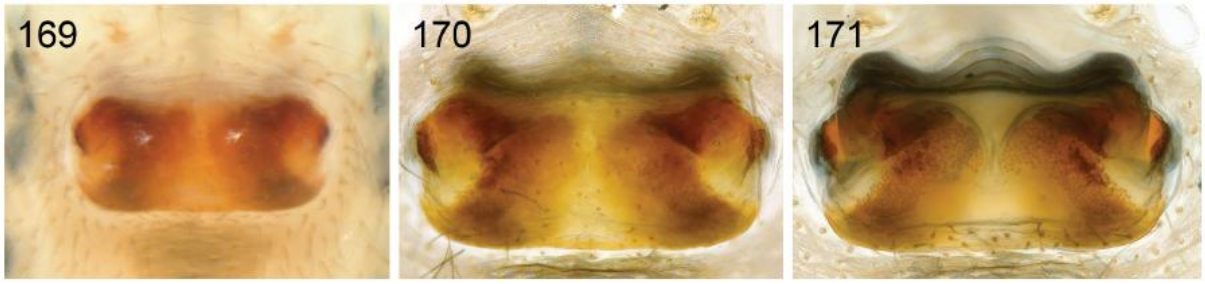

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171. *A. gaya* Huber, sp. nov. —