Panjange casaroro Huber, 2015

Huber BA, Nuñeza OM. 2015. Evolution of genital asymmetry, exaggerated eye stalks, and extreme palpal elongation in *Panjange* spiders (Araneae: Pholcidae). European Journal of Taxonomy 169: 1-46.

p. 9

6–7. *Pa. casaroro* Huber sp. nov., ♂♂.

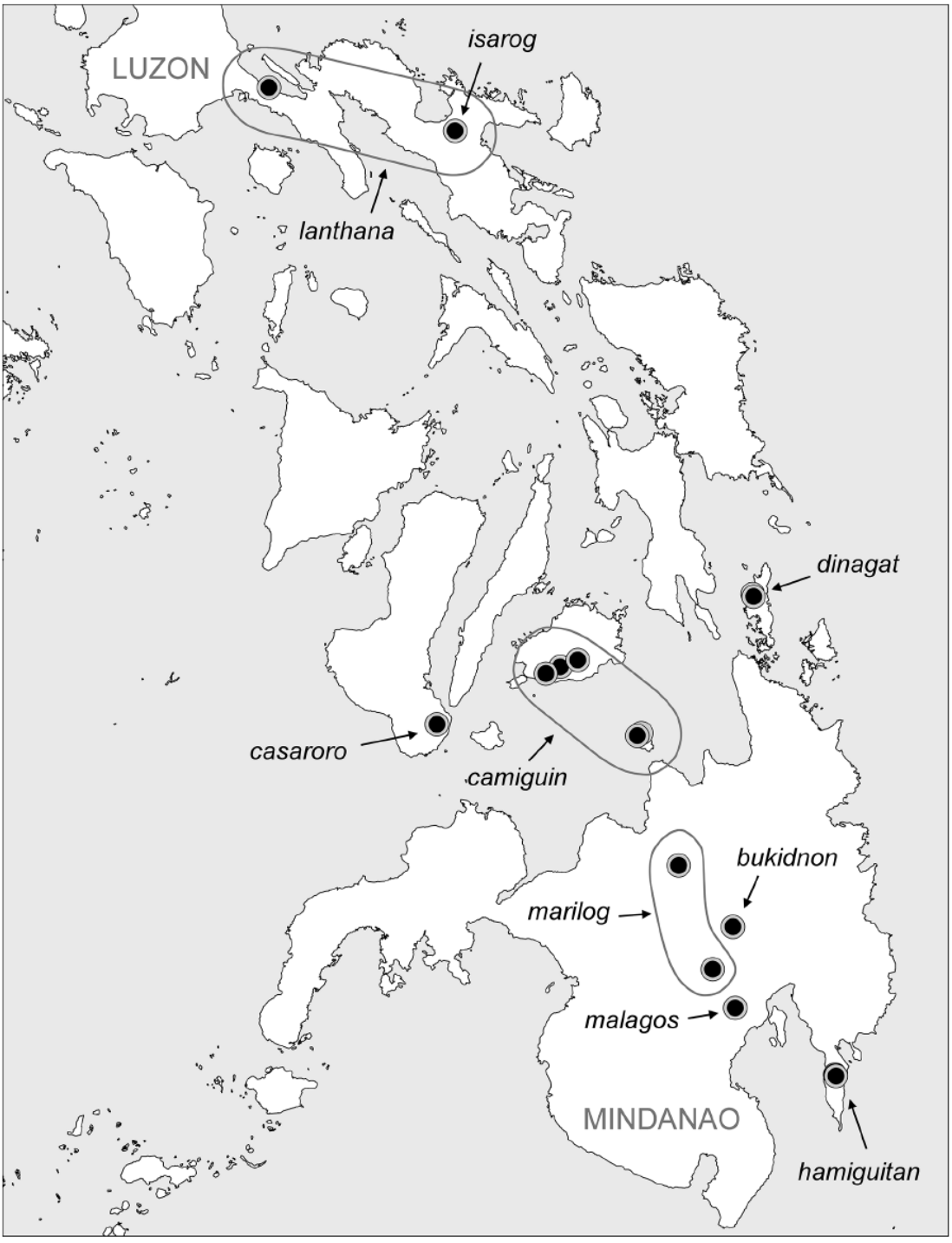

Fig. 16. Known distribution of the *Panjange lanthana* group.

Panjange casaroro Huber sp. nov.
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Figs 6–7, 24–34

Diagnosis

Easily distinguished from closest known relatives (*Pa. malagos* Huber sp. nov.; *Pa. camiguin* Huber sp. nov.) by morphology of male palps (Figs 24–27; symmetric modifications of trochanter and femur; asymmetric shapes of procursi), and by pair of semi-transparent lobes on epigynal scape (Figs 29, 33). From most congeners (except *Pa. camiguin* Huber sp. nov.) also by very long eye stalks and contiguous tips of male ocular processes (Fig. 28); from *Pa. camiguin* Huber sp. nov. also by proximally unmodified male chelicerae (densely covered with small scales in *Pa. camiguin* Huber sp. nov.; cf. Fig. 47) and by small process between eye stalks (Fig. 28).

Etymology

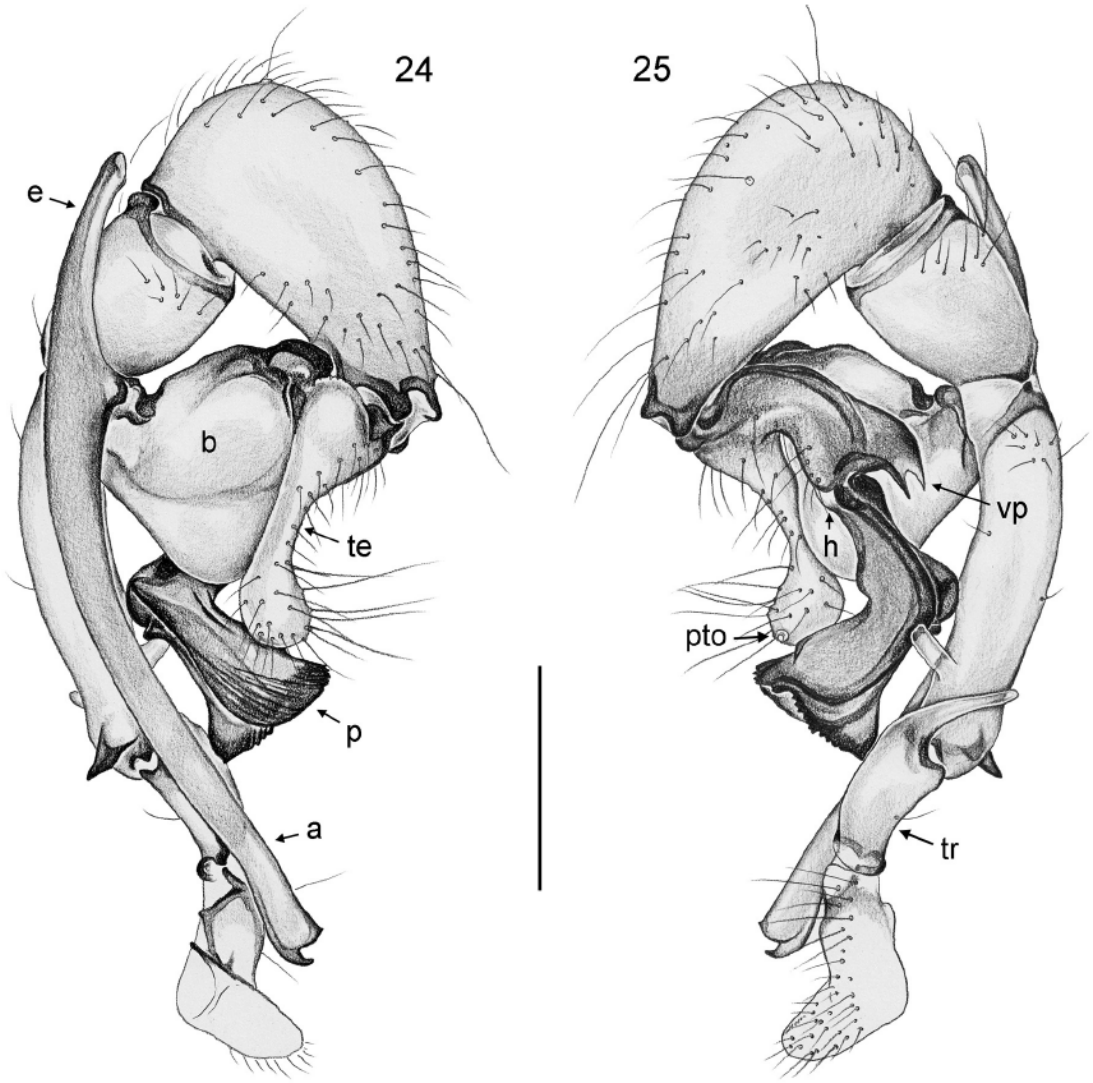
The species name is derived from the type locality; noun in apposition.

Type material

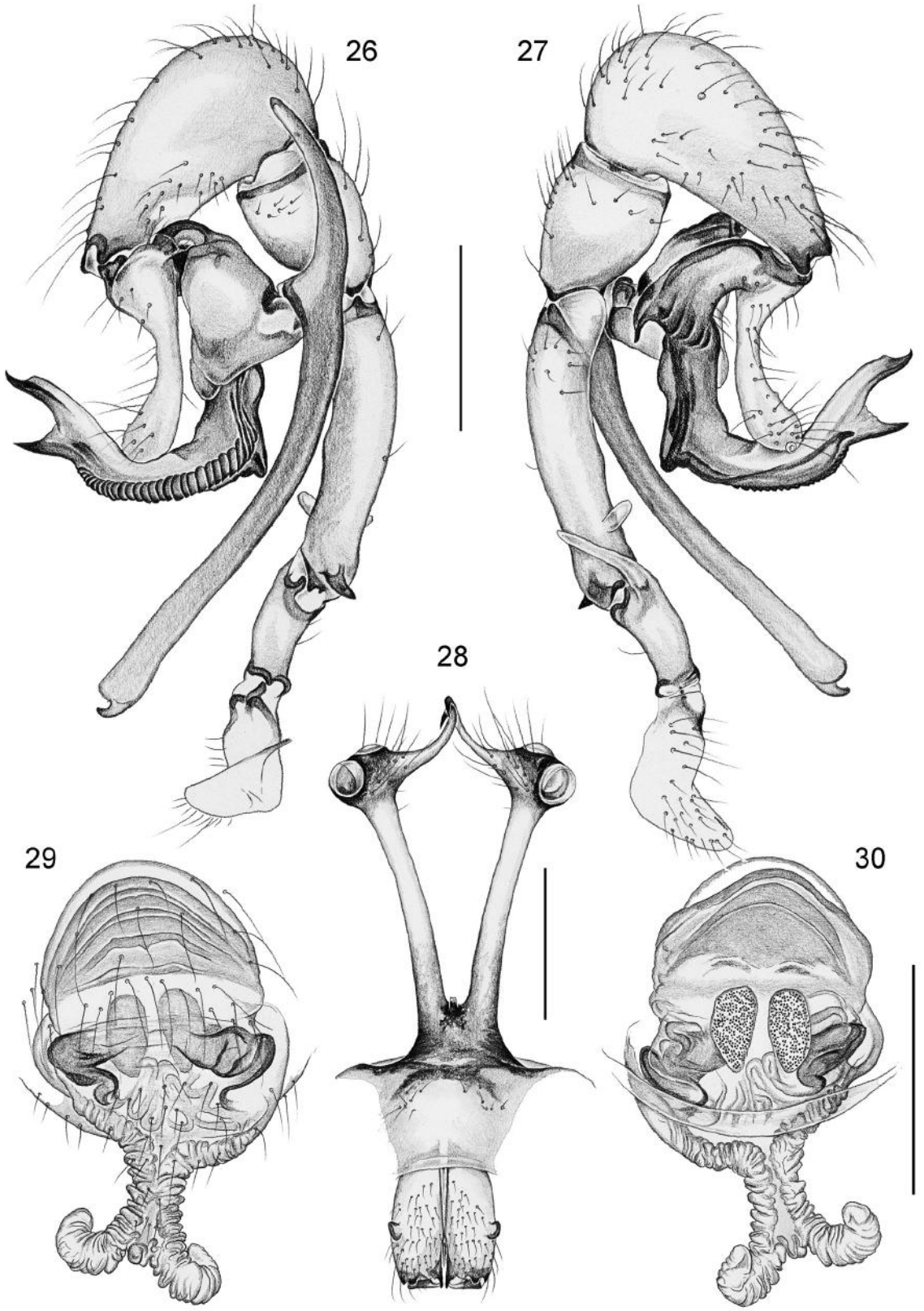
PHILIPPINES: holotype ♂, in ZFMK (Ar 13000), Negros Island, Negros Oriental Province, Casaroro Falls (9.281°N, 123.208°E), 550 m a.s.l., forest along river below waterfall, on leaves, 10 Mar. 2014 (B.A. Huber).

Other material examined

PHILIPPINES: 1 ♂, 3 ♀♀ in ZFMK (Ar 13001) and 1 ♂, 1 ♀ in MSU-IIT, same data as holotype; 1 ♀, 1 juv. in pure ethanol, in ZFMK (Phi 187), same data.



Figs 24–25. *Panjange casaroro* Huber sp. nov. (ZFMK, Ar 13001), left male palp, prolateral and retrolateral views. Abbreviations: a = appendix; b = genital bulb; e = embolus; h = hinge; p = procursus; pto = palpal tarsal organ; te = tarsal elongation; tr = trochanter; vp = ventral process. Scale bar = 0.5 mm.

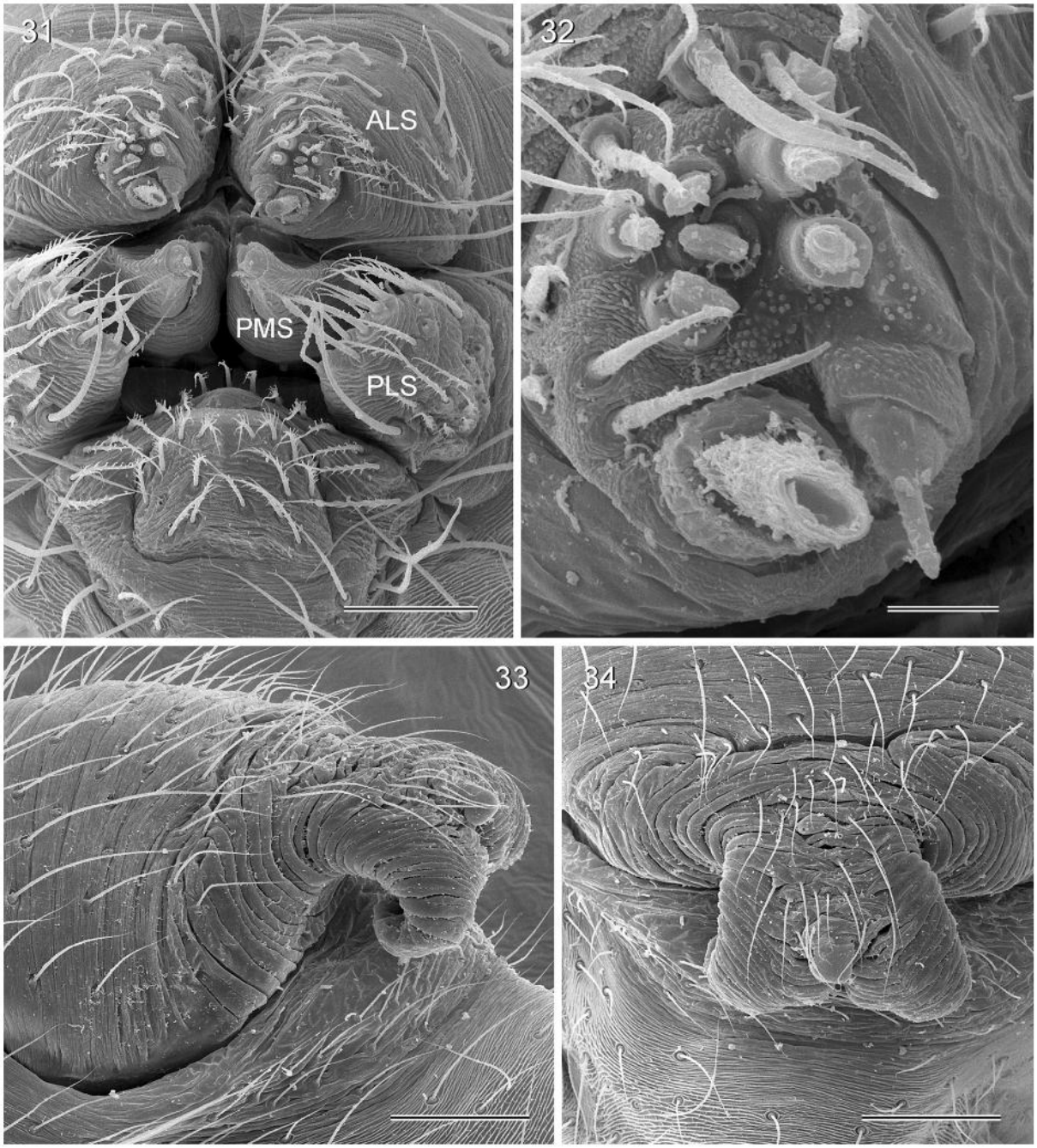


Figs 26–30. *Panjange casaroro* Huber sp. nov. (ZFMK, Ar 13001). **26–27**. Right male palp, prolateral and retrolateral views. **28**. Male prosoma and chelicerae, frontal view. **29–30**. Cleared female genitalia, ventral and dorsal views. Scale bars = 0.5 mm.

Description

Male (holotype)

MEASUREMENTS. Total body length 4.8, carapace width 1.0. Leg 1: 39.2 (9.2 + 0.5 + 9.4 + 18.9 + 1.2), tibia 2: 5.6, tibia 3: 3.2, tibia 4: 4.9; tibia 1 L/d: 106. Distance PME–PME 420 µm, diameter PME 105 µm, distance PME–ALE ~30 µm; AME absent.



Figs 31–34. *Panjange casaroro* Huber sp. nov., SEM micrographs (ZFMK, Ar 13001). **31**. Female spinnerets. **32**. Female ALS. **33–34**. Epigynum and scape. **33**. Lateral (slightly posterior) view. **34**. Ventral view. Abbreviations: ALS, anterior lateral spinneret; PLS = posterior lateral spinneret; PMS = posterior median spinneret. Scale bars: 31 = 60 µm; 32 = 10 µm; 33–34 = 100 µm.

COLOR. Carapace and clypeus pale ochre to whitish, only base of eye stalks dark; sternum whitish; legs ochre-yellow with dark brown patellae and tibia-metatarsus joints; abdomen pale gray, with black marks dorsally, monochromous ventrally.

BODY. Habitus as in Figs 6–7; ocular area raised, triads on long stalks with further distal processes whose contiguous tips seem to form a functional unit (Fig. 28); with small process between eye stalks; carapace without median furrow; clypeus unmodified; sternum wider than long (0.65/0.55), unmodified.

CHELICERAE. As in Fig. 28, with pair of simple, weakly sclerotized lateral processes, without modified hairs; without stridulatory ridges.

PALPS. As in Figs 24–27; proximal segments symmetric in shape but slightly larger on left side (e.g., length and diameter of right tibia about 90–95% of left tibia); coxa with strong ventro-distal rim but otherwise unmodified; trochanter with long weakly sclerotized retrolateral process directed toward dorsal; femur with weakly sclerotized finger-shaped process retrolatero-ventrally and more heavily sclerotized apophysis prolatero-dorsally; tibia with retrolateral trichobothrium in rather proximal position; tarsus with long whitish elongation, distally more strongly widened (club-shaped) in left palp; procursi of left and right palps strongly different, in each case with ventral process arising from proximal part (simple in right palp; bifid in left palp); distal part of procursus clearly hinged in left palp, not hinged in right palp; bulb much smaller in right palp, long processes extending in opposite directions (dorsal embolus; ventral appendix) almost symmetric (slightly longer in left palp).

LEGS. Without spines and curved hairs; few vertical hairs; retrolateral trichobothrium on tibia 1 at 3%; prolateral trichobothrium absent on tibia 1, present on other tibiae; tarsus 1 with > 20 pseudosegments, only distally fairly distinct.

Male (variation)

Tibia 1 in other male: 9.5 (missing in third male).

Female

In general similar to male but eye triads on low humps and much closer together (distance PME–PME 265 μm); with dark mark in place of AME. Tibia 1 in 4 females: 6.7, 7.0, 7.1, 7.4. Epigynum mostly weakly sclerotized, with apparently slightly asymmetric internal structures visible through cuticle; distinctive scape with small median process at tip and two long extensible projections curved toward dorsal (Figs 29, 33, 34); internal genitalia as in Fig. 30.

Natural history

The spiders were found on the undersides of large leaves about 50–100 cm above the ground.

Distribution

Known from type locality on Negros Island only (Fig. 16).