Panjange marilog 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.

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14–15. Pa. marilog Huber sp.

nov., $\delta\delta$ showing color variation.

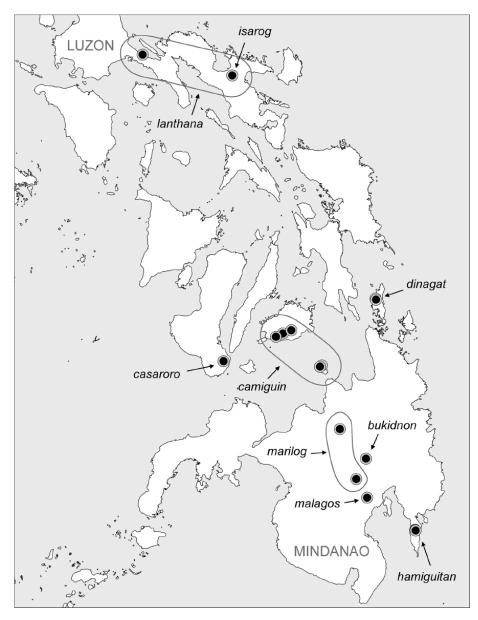


Fig. 16. Known distribution of the Panjange lanthana group.

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Panjange marilog Huber sp. nov. urn:lsid:zoobank.org:act:0B086DBA-DB8C-4253-AB9C-E932F2697216 Figs 14–15, 79–89

Diagnosis

Easily distinguished from most known relatives (except *Pa. dinagat* Huber sp. nov.) by complex male palpal trochanter apophysis (Fig. 80), and by widening of epigynal scape in mid-section (Fig. 82); from *Pa. dinagat* Huber sp. nov. by male pedipalp (Figs 79–80; relatively more slender tibia; longer whitish elongation of tarsus; different shapes of procursus and appendix; wider embolus) and female genitalia (wider than long; Fig. 82).

Etymology

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

Type material

PHILIPPINES: holotype ♂, in ZFMK (Ar 13018), Mindanao, Davao del Sur Province, Marilog Distr., Baganihan (7.469°N, 125.250°E), 1210 m a.s.l., primary forest near road, on leaves, 15 Feb. 2014 (B.A. Huber, E. Mondejar).

Other material examined

PHILIPPINES: Davao del Sur Province: $4 \circlearrowleft \circlearrowleft, 1 \hookrightarrow \text{in ZFMK (Ar 13019)}$ and $1 \circlearrowleft \text{in MSU-IIT, same}$ data as holotype; $2 \hookrightarrow \circlearrowleft, 3$ juvs in pure ethanol, in ZFMK (Phi 255), same data; $1 \circlearrowleft, 1 \hookrightarrow \text{in ZFMK (Ar 13020)}$, same locality, "site 2" (7.4563°N, 125.2390°E), 6 Dec. 2014 (M.A. Responte); $1 \circlearrowleft, 2 \hookrightarrow \circlearrowleft, 3$ juvs in ZFMK (Ar 13021) and $1 \circlearrowleft, 1 \hookrightarrow \text{in MSU-IIT, same locality, "site 3" (7.4696°N, 125.2452°E), 7 Dec. 2014 (M.A. Responte). Bukidnon Province: <math>2 \circlearrowleft \circlearrowleft, 4 \hookrightarrow \circlearrowleft, 7$ juvs in ZFMK (Ar 13022) and $1 \circlearrowleft, 1 \hookrightarrow \text{in MSU-IIT, all poorly preserved, Imbayao (8.1344°N, 125.0297°E), 9–10 Feb. 2015 (E.P. Mondejar).$

Description

Male (holotype)

Measurements. Total body length 5.1, carapace width 1.2. Leg 1: 41.2 (9.6 + 0.5 + 9.7 + 19.1 + 2.3), tibia 2: 6.5, tibia 3: 3.8, tibia 4: 5.7; tibia 1 L/d: 97. Distance PME–PME 470 μ m, diameter PME 90 μ m, distance PME–ALE ~50 μ m; AME absent.

Color. Carapace pale ochre yellow to whitish, without posterior mark, ocular area and clypeus dark brown, with black mark in AME area; sternum whitish; legs ochre-yellow with dark brown patellae and tibia-metatarsus joints; abdomen ochre-gray, with black marks dorsally, monochromous ventrally.

Body. Habitus as in Fig. 14; ocular area raised, each triad on long stalk, with pointed curved process arising from near PME and directed toward anterior (Figs 81, 84, 87); carapace without median furrow; clypeus with two patches of modified hairs: slightly stronger hairs below black mark and distinct field of ~20 short spines more distally (Figs 84–85); sternum wider than long (0.70/0.60), unmodified.

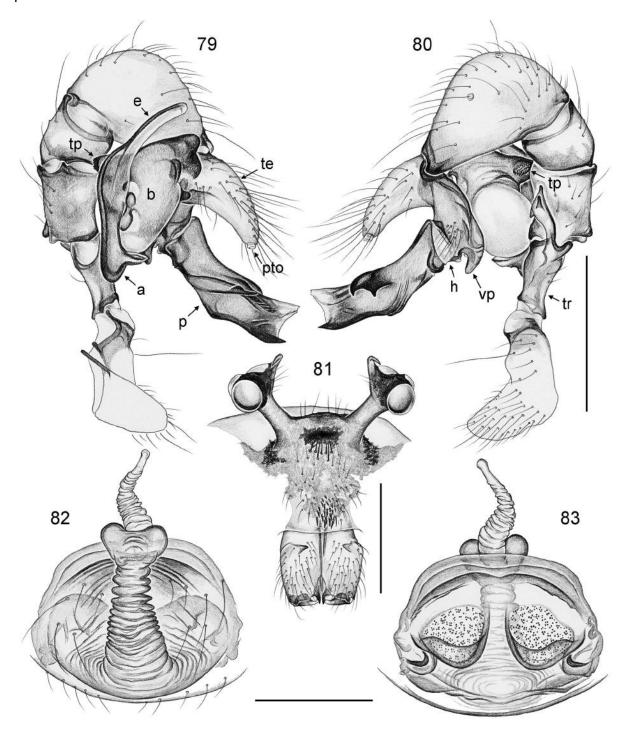
CHELICERAE. As in Figs 81 and 84, with pair of simple, weakly sclerotized processes in rather frontal position directed toward median; without modified hairs; without stridulatory ridges.

Palps. As in Figs 79–80; symmetric; coxa with strong ventro-distal rim but otherwise unmodified; trochanter relatively long, with simple retrolatero-dorsal process and complex retrolatero-ventral apophysis distally curved toward prolateral, with two distinctive subdistal branches directed toward distal and retrolateral respectively; femur short, with two short dorsal processes and indistinct prolateral hump; tibia very thick (tibia width ~60% of length); tarsus with whitish elongation with terminal capsulate tarsal organ (Fig. 89); procursus proximal part with ventral process, distal part hinged, with distinctive retrolateral process and simple flat prolateral process; bulb with strong proximal sclerite, long processes extending in opposite directions (dorsal embolus; ventral appendix), with retrolateral process arising from proximal bulbal sclerite, with small round sclerite between appendix and bulb.

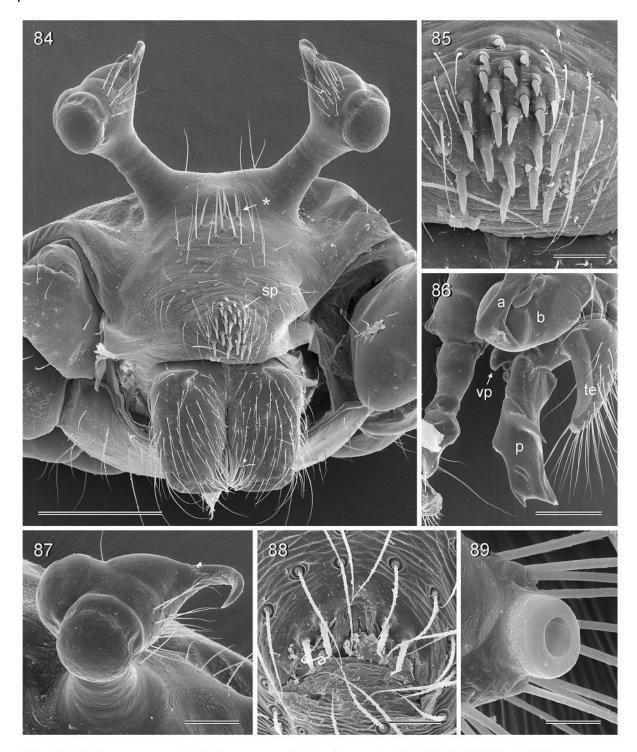
Legs. Without spines and curved hairs; few vertical hairs; retrolateral trichobothrium on tibia 1 at 2%; prolateral trichobothrium absent on tibia 1, present on other tibiae; tarsus 1 with > 30 pseudosegments, only distally fairly distinct.

Male (variation)

Tibia 1 in 10 other males: 9.2–10.4 (mean 9.6). Background color of abdomen with variable shades of reddish to light brown (Figs 14–15).



Figs 79–83. *Panjange marilog* Huber sp. nov. (ZFMK, Ar 13019) **79–80.** Left male palp, prolateral and retrolateral views. **81.** Male prosoma and chelicerae, frontal view. **82–83.** Cleared female genitalia, ventral and dorsal views. Abbreviations: a = appendix; b = genital bulb; e = embolus; h = hinge; p = procursus; pto = palpal tarsal organ; te = tarsal elongation; tp = toothed process of proximal bulbal sclerite; tr = trochanter; vp = ventral process. Scale bars: 79–81 = 0.5 mm; 82–83 = 0.3 mm.



Figs 84–89. *Panjange marilog* Huber sp. nov., SEM micrographs (ZFMK, Ar 13019). **84.** Male prosoma, frontal view (asterisk marks stronger hairs below ocular area). **85.** Spines on male clypeus. **86.** Left male palp, prolateral view. **87.** Right eye stalk, triad, and hooked process, oblique frontal view. **88.** Male gonopore. **89.** Male palpal tarsal organ. Abbreviations: a = appendix; b = genital bulb; p = procursus; te = tarsal elongation; sp = spines on clypeus; vp = ventral process. Scale bars: $84 = 300 \ \mu m$; $85 = 40 \ \mu m$; $86 = 200 \ \mu m$; $87 = 80 \ \mu m$; $88 = 30 \ \mu m$; $89 = 20 \ \mu m$.

Female

In general similar to male but eye triads on low humps and much closer together (distance PME–PME 240 μ m); clypeus unmodified. Tibia 1 in 4 females: 7.1, 7.3, 7.3, 7.5. Epigynum weakly sclerotized plate with scape directed toward anterior, scape strongly folded, apparently extensible, with distinctive widening in mid-section (Fig. 82), distal part semitransparent; internal genitalia as in Fig. 83.

Natural history

The spiders were found on the undersides of leaves about 0.5–1 m above the ground.

Distribution

Known from two localities on Mindanao Island (Fig. 16).