

## Terminology and measurements

The foramen on the posterior face of the propodeum, into which the petiole inserts, may be delimited by a distinct semicircular dorsal carina. The presence or absence of this carina varies among species. Brandão (1990) used the term "epipetiolar carina" for this structure; here it is referred to as the "foraminal carina."

The following measurements and indices are reported:

HL: head length; in full-face view, maximum length of head, from line tangent to anteriormost projection of head capsule or clypeus to line tangent to posteriormost projection of posterior margin of head (including occipital carina, if visible).

HW: head width; in full-face view, maximum width of head capsule **including eyes** if they protrude beyond margins of head.

SL: scape length; length of scape shaft from apex to basal flange, not including basal condyle and neck.

EL: eye length; maximum length of compound eye, with head oriented to maximize length (i.e., not full-face view).

ML: mesosoma length; in lateral view, distance from base of anterior face of pronotum (at inflection point between downward-sloping anterior face and flange-like anteriormost projection of pronotum [the latter extending to foramen and usually partially hidden by head capsule]) to posteriormost extension of propodeal lobes.

CI: cephalic index;  $100 \cdot HW/HL$ .

SI: scape index;  $100 \cdot SL/HL$ .

## Methods

Observations were made at 63x magnification with a Leica MZ12.5 dissecting microscope. Measurements were made with a dual-axis micrometer stage with output in increments of 0.001 mm. However, variation in specimen orientation, alignment of crosshairs with edges of structures, and interpretation of structure boundaries resulted in measurement accuracy to the nearest 0.02 to 0.005 mm, depending on sharpness of the defined boundary. All measurements are presented in mm.

All holotypes and paratypes associated with the new species described here have unique specimen-level identifiers ("specimen codes") affixed to each pin. When multiple specimens are on the same pin, they share a single specimen code. The specimen codes are listed for type material. Specimen codes should not be confused with collection codes, which are associated with particular collection events. When reported, collection codes follow the collector. Specimen collection data are derived from a specimen database and are not direct transcriptions of labels. Images of holotypes, distribution maps, and all specimen data on which this paper is based are available on AntWeb ([www.antweb.org](http://www.antweb.org)).

## Repositories

Collections are referred to by the following acronyms, which follow the Insect and Spider Collections of the World website (<http://hbs.bishopmuseum.org/codens/>) and/or the Registry of Biological Repositories (<http://www.biorepositories.org/>):

CAS California Academy of Sciences, San Francisco, CA, USA.

INBC Instituto Nacional de Biodiversidad, Costa Rica.

LACM Los Angeles County Museum of Natural History, Los Angeles, CA, USA.

MCSN Museo Civico di Storia Naturale "Giacomo Doria," Genoa, Italy.

MCZ Museum of Comparative Zoology, Cambridge, MA, USA.

MZSP Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil.

UCD Bohart Museum of Entomology, University of California, Davis, CA, USA.

USNM National Museum of Natural History, Washington, DC, USA.