

Taxonomic revision of the genus *Prionopelta* Mayr, 1866 (Formicidae: Amblyoponinae) for the Neotropical region

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Abstract

The ant genus *Prionopelta* Mayr, 1866 is revised for the Neotropics. Morphological traits combined with geographical data led to the recognition of eight species, four of them described here as new: *Prionopelta dubia* sp. n., *Prionopelta menininha* sp. n., *Prionopelta minuta* sp. n., and *Prionopelta tapatia* sp. n. *Prionopelta marthae* Forel, 1909 is proposed as a new junior synonym of *Prionopelta antillana* Forel, 1909. External morphological descriptions of the worker caste for all species are provided, as well as for some of the males and queens, mostly described here for the first time. Identification keys for all known castes, distribution maps and high-resolution illustrations are supplied for all species.

Key words: systematics, morphology, distribution, Dracula-ants, Amblyoponinae

Introduction

Prionopelta is a pantropical genus of ants mainly known from leaf litter and rotten wood. It is in the subfamily Amblyoponinae, which currently groups nine extant genera (Saux *et al.* 2004; Esteves & Fisher 2015; Ward & Fisher 2016; Branstetter *et al.* 2017; Bolton 2020). In these studies, *Prionopelta* has been recovered as monophyletic, sister to a clade constituted by *Amblyopone* and *Onychomyrmex*. The genus currently encompasses 22 valid species of monomorphic ants (Bolton 2020), five of which occur in the Neotropical region: *P. amabilis* Borgmeier, 1949, *P. an-*

tillana Forel, 1909, *P. marthae* Forel, 1909, *P. modesta* Forel, 1909 and *P. punctulata* Mayr, 1866 (Bolton 2020). In contrast to the taxonomic knowledge of the genus in the Indo-Pacific and Malagasy regions (Shattuck 2008; Overson & Fisher 2015), no comprehensive work involving *Prionopelta* has been conducted in the Neotropical region since Brown (1960). Among the important contributions of the latter work is the current key for the identification of the Neotropical species. However, this key does not include *P. marthae*, and *P. amabilis* and *P. antillana* are separated by geographic data alone. These three species are a major taxonomic problem in the genus because they are very similar morphologically and are now known to have zones of sympatry (Esteves & Fisher 2015). Modified versions of Brown's key (Arias-Penna 2008, Fernández *et al.* 2019) did not resolve the problem.

The genus has monomorphic workers and shows traits of a cryptobiotic life, including small size, pale color and elongate mandibles (Brown 1960). *Prionopelta* is commonly found in large colonies with a simple social organization, nesting in leaf litter, soil, fallen logs and under stones, and mainly collected in forest habitats. They are predators of small invertebrates and may have food preference for diplopods. Queens and males are only known for a few species (Mayr 1866; Forel 1893). Hölldobler & Wilson (1986) and Hölldobler *et al.* (1992) made detailed natural history observations on captive colonies of *P. amabilis* and *P. modesta*. Little is known about the natural history of the remaining Neotropical species.

Both the implementation of the Winkler technique as a capture method for ants and the recent availability of collection records in on-line databases have been crucial in expanding the knowledge of *Prionopelta* biology. Winkler sampling greatly increased the number of specimens available for study and the resolution of geographic ranges and habitat preferences of species. On-line databases facilitated access to unpublished natural history observations, beyond the limited data available on specimen labels.

The present paper provides a review of the taxonomy and geographical distribution of the Neotropical species of these cryptobiotic ants.

Methods

Approximately 4,000 *Prionopelta* specimens from museums, personal collections and high-resolution images available in AntWeb.org were examined in this work. Institutional acronyms are cited as follow:

ABS	Archbold Biological Station, Lake Placid, Florida, U.S.A.
ASU	Arizona State University, Tempe, Arizona, U.S.A.
ALWC	Personal collection of Alex L. Wild at University of Texas, Austin, Texas, U.S.A.
AMNH	American Museum of Natural History, New York City, New York, U.S.A.
ANIC	Australian National Insect Collection, CSIRO, Canberra, Australia.
BMNH	The Natural History Museum, London, United Kingdom
CASC	California Academy of Sciences, San Francisco, California, U.S.A.
CEPEC	Centro de Pesquisas do Cacau, Comissão Executiva do Plano de Lavoura Cacaueira (CEPLAC), Ilhéus, BA, Brazil.
DZUP	Coleção Entomológica Pe. Jesus Santiago Moure, Universidade Federal do Paraná, Curitiba, PR, Brazil.
EcoFoG	Joint Research Unit, Ecologie des Forêts de Guyane, Korou, French Guiana.
IMLA	Fundación e Instituto Miguel Lillo, Universidad Nacional de Tucumán, Tucumán, Argentina.
INPA	Instituto Nacional de Pesquisas da Amazônia, Manaus, AM, Brazil.
JTLC	Personal collection of John T. Longino at University of Utah, Salt Lake City, Utah, U.S.A.
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, U.S.A.
MHNG	Musée d'Histoire Naturelle, Geneva, Switzerland.
MIZA	Museo del Instituto de Zoología Agrícola Francisco Fernández Yépez, Universidad Central de Venezuela, Maracay, Aragua, Venezuela.
MPEG	Museu Paraense Emílio Goeldi, Belém, PA, Brazil.
MZSP	Museu de Zoologia da Universidade de São Paulo, São Paulo, SP, Brazil.
NHMB	Naturhistorisches Museum, Augustinergasse 2, Basel, Switzerland.
NHMW	Naturhistorisches Museum Wien, Vienna, Austria.

PSWC	Personal collection of Philip S. Ward at the University of California, Davis, California, U.S.A.
UCDC	R. M. Bohart Museum of Entomology, University of California, Davis, California, U.S.A.
UFGD	Museu da Biodiversidade, Universidade Federal da Grande Dourados, Dourados, MS, Brazil.
UFV	Museu de Entomologia, Universidade Federal de Viçosa, Viçosa, MG, Brazil.
UNAB	Museo Entomológico de la Universidad Nacional-Agronomía, Bogotá, Colombia.
USNM	United States National Museum of Natural History, Smithsonian Institution, Washington D.C., U.S.A.
ZMUC	Universitetets Zoologiske Museum, Copenhagen, Denmark.

Specimens were examined and high-resolution images were acquired at the *Laboratório de Sistemática e Biologia de Formigas*, *Universidade Federal do Paraná* (UFPR). Observations were made with a Leica S8APO stereomicroscope at magnifications up to 80X. High-resolution images were taken with a Zeiss Discovery V20 stereomicroscope with coupled camera Axiocam 305 color and the software Zen 2.3. SEM micrographs were made using the scanning electron microscope JEOL JSM-6360 LV, at the *Centro de Microscopia Eletrônica* (CME), under magnifications from 10 µm to 500 µm. All images presented here were edited in order to standardize the background, sharpness, brightness and contrast. We additionally used modified photos taken by colleagues or deposited in AntWeb.org for illustration of the key or species plates. In order to observe *Prionopelta* mouthparts, we performed dissections of a few specimens in glycerin after clearing with KOH.

Distribution maps were generated with Quantum GIS 2.18 based on reported coordinates or georeferenced in Google Earth. Localities with inaccurate data were corrected on maps. For records without coordinates, the geographic center of the most specific reported site was included.

Terminology for external morphology of workers and reproductive forms mainly follows Bolton (1994) and Boudinot (2015) (Fig. 1). Additional morphological terms were used from Keller (2011), Fisher & Bolton (2016) and the Hymenoptera Anatomy Ontology Portal (HAO 2020). Abbreviations were proposed if unavailable from the sources cited above (Fig. 1). Terminology for sculpturing follows Harris (1979), reinterpreted from Overson & Fisher (2015) and Shattuck (2008). We use “foveolate” to refer to flat-bottomed pits, and “punctulate” and “punctate” to refer to point-like depressions of the integument that appear as shallow or deep pin-pricks, respectively. Terms for wing venation follow Yoshimura & Fisher (2012).

An indirect cold-lighting system is strongly recommended when using the identification key, particularly regarding the head sculpturing of *Prionopelta*, because this feature can be misinterpreted under warm light. Here we used a 60-watt fluorescent lamp.

Measurements are presented in mm and mainly follow Shattuck (2008). All measurements were acquired with a micrometric reticulum coupled to a stereomicroscope at magnifications up to 100X and with ImageJ 1x (Schneider *et al.* 2012).

The following measurements and indices are used:

HL	Maximum head length in full-face view, midline distance from the anterior-most point of the clypeal margin to the posterior-most point of the head.
HW	Maximum head width in full-face view, including eyes.
SL	Length of the antennal scape in full-face view, excluding the basal neck and condyle.
WL	Mesosomal length or Weber's length, measured in lateral view, from the anterior surface of the pronotum (excluding the collar) to the posterior extension of the propodeal lobes.
PrL	Maximum length of the pronotum (excluding the collar) in dorsal view.
PrW	Maximum width of the pronotum in dorsal view.
PetNL	Midline length of the petiolar node in dorsal view.
PetW	Midline width of the petiolar node in dorsal view.
PetH	Maximum height of the petiole measured in lateral view, as the perpendicular distance from the dorsal surface of the petiolar node to the ventral margin of the petiolar node, immediately anterior to the subpetiolar process.
PetL	Maximum length of the petiole in lateral view, measured from the anterior face to the posterior margin of the petiole.
T1L	Length of first gastral (third abdominal) tergite in dorsal view.

- T1W** Width of first gastral (third abdominal) tergite in dorsal view.
- TL** Total length, calculated as the sum of HL, WL, PetL and T1L.
- CI** Cephalic index, calculated as HW/HL x 100.
- SI** Scape index, calculated as SL/HW x 100.
- PetI** Petiole index, calculated as PetW/PetNL x 100.
- PetHI** Petiole height index, calculated as PetH/PetL x 100.
- PetWI** Petiole width index, calculated as PetW/PetL X 100.

Species are arranged alphabetically in the Species Accounts. Lectotypes are designated when pertinent in order to improve nomenclatural stability. Natural history observations are based on literature, collection notes from the species available in AntWeb.org, and specimen labels.

The diagnosis and description of the genus are based only on the Neotropical species. Diagnoses and descriptions of the species are elaborated following the ant body orientation, from mandibles to the apex of gaster. Color, sculpturing and pilosity are described first, followed by body shape characters. Only characters that vary among species are included in the species descriptions.

Characters in the couplets of the identification keys are presented in decreasing order of discriminatory utility. Although a single key for workers and queens is provided, the illustrations are based on workers only.

Remarks on taxonomy and comparative notes are presented in a Comments section after each species description. A detailed list of the examined material is also provided for each species account.

Taxonomic synopsis

Prionopelta amabilis Borgmeier, 1949. Honduras to Brazil.

P. antennata Forel, 1909. United States of America and Lesser Antilles to Brazil.

= *P. marthae* Forel, 1909 new synonym.

P. dubia new species. Mexico to Brazil.

P. menininha new species. Brazil.

P. minuta new species. Colombia and Brazil.

P. modesta Forel, 1909. Mexico to Guyana.

P. punctulata Mayr, 1866. Brazil to Argentina.

= *P. mayri* Forel, 1909

= *P. bruchi* Santschi, 1923

P. tapatia new species. Mexico.

Taxonomy

Prionopelta Mayr, 1866

Prionopelta Mayr, 1866: 503 (queen). Type-species: *Prionopelta punctulata*, by monotypy.

Prionopelta in Ponerinae: Dalla-Torre, 1893: 15.

Prionopelta in Amblyoponinae: Forel, 1893: 162; Forel, 1895: 110 [Amblyoponeridae].

Prionopelta in Ponerinae, Proceratiini: Ashmead, 1905: 382.

Prionopelta in Ponerinae, Ectatommini: Emery, 1911: 32 [subtribe Typhlomyrmecini]; Forel, 1917: 236; Wheeler, 1922: 642.

Prionopelta in Ponerinae, Amblyoponini: Kusnezov, 1955: 275 [subtribe Ericapeltini]; Emery 1895: 766; Wheeler, 1910: 134; Brown, 1953: 11; Brown, 1960: 173.

Prionopelta in Amblyoponinae, Amblyoponini: Bolton, 2003: 42, 156; all subsequent authors.

Junior synonyms:

Concoctio Brown, 1974. Synonymy by Ward & Fisher, 2016: 691.

Exambyopone Donisthorpe, 1949. Synonymy by Brown, 1951: 102.

Renea Donisthorpe, 1947. Synonymy by Brown, 1953: 11.

Genus references (Bolton, 2020): Dalla-Torre, 1893: 15 (catalogue); Forel, 1909: 242 (New World species key);

Emery, 1911: 32 (diagnosis, catalogue); Chapman & Capco, 1951: 26 (Asia checklist); Wilson, 1958: 146 (Melanesia species key); Brown, 1960: 173, 218, 221 (review of genus, Neotropical species key, Indo-Australian species key); Kempf, 1972: 210 (Neotropical catalogue); Smith, 1979: 1335 (North America catalogue); Taylor & Brown, 1985: 39 (Australia catalogue); Taylor, 1987: 64 (Australia & New Caledonia checklist); Bolton, 1995a: 1052 (census); Bolton, 1995b: 364 (catalogue); Shattuck, 1999: 201 (Australia synopsis); Shattuck, 2008: 22 (Indo-Pacific species revision, key); Arias-Penna, 2008: 48 (Neotropical species key); Yoshimura & Fisher, 2012: 16 (male diagnosis); Overson & Fisher, 2015: (Malagasy species revision, key); Fisher & Bolton, 2016: (guide to Malagasy genera); Cantone, 2017: 106 (brief male diagnosis); Fernández, Delsinne & Arias-Penna, 2019: 501 (Neotropical species key).

Genus diagnosis (New World species). Monomorphic amblyoponine ants. Body covered by punctulate, punctate and foveolate sculpturing, except for the smooth mandible, antenna, legs and propodeal declivity; integument entirely covered by pubescence and flexuous setae. Mandible tridentate, short and adjacent to clypeus when closed. Clypeus convex and anteriorly with a row of tooth-like stout setae, the surfaces of which are carinate (only visible under SEM images). Antennomeres 1–4 forming a club. Petiole broadly attached to gaster.

Worker description. Small-sized ants (TL 1.23–1.76mm). Color pale-yellow to light brown. Integument thick, shiny and sculptured on head, mesosoma, petiole and gaster; surface of tooth-like setae of the anterior clypeal margin carinate; body with point-like sculpture that varies in size, depth and density and is more distinct on head dorsum, particularly on the lateral portion of frons; ventral portion of katepisternum weakly reticulate/aerolate; ventral portion of metapleuron weakly reticulate/imbricate. Body with three kinds of pilosity: pubescence, short setae, and long setae; pubescence converging to center/median line of sclerites, more obvious on head dorsum, pronotum and first gastral tergite; long setae almost of same length as antennomeres 1–2 together; short setae as long as preapical antennomere; in full-face view, mandible with short and long setae; dorsal and ventral surface of mandible with at least eight sparse, long and flexible setae each; anterior portion of the median area of clypeus with a pair of long flexible setae directed anteriorly; midportion of the clypeal median area with a pair of long flexible setae directed dorsally; posterior portion of the median area of clypeus with one long flexible seta directed dorsally; antenna pubescent, scape with short erect setae; head dorsum and mesosoma pubescent; pronotum with short, erect and dispersed setae; mesonotum and propodeum with sparse, erect and long setae; propodeal declivitous face devoid of pilosity; petiolar node with some erect and long setae; subpetiolar process with one or two long posteriorly curved setae.

Head as long as or slightly longer than broad, lateral margins slightly convex, smoothly converging anteriorly; posterior corners convex; posterior margin weakly concave. Mandible subtriangular, short and adjacent to the anterior clypeal margin when closed; basal margin convex or straight; masticatory margin tridentate; apical tooth longest, size proportion between basal and median tooth variable, diastema between basal and median tooth longer than between the latter and the apical tooth. Anterior clypeal margin rounded or with median portion projecting anteriorly; anterolateral margin sinuate; medial carina not reaching the anterior margin; tooth-like stout setae slightly directed anterolaterally, apparently rising from the anterior clypeal margin and (1) under a clypeal lamella that varies in length or (2) welded along this lamella. Palp formula 2:2. Frontal lobe small, approximated, partially covering the antennal socket. Eleven or twelve antennomeres; antennomeres 1–4 forming a club, each one separated from the other by shallow to deep constrictions; scape elongate and uniform until half of its length, then slightly thick and curved at apex; scape not reaching the posterior margin of head. Compound eye reduced, set laterally at or immediately posterior to the head midlength. Postgenal suture present and complete, extending towards posterior margin; in ventral view, median portion of the occipital margin of head concave.

Mesosoma unarmed. Dorsal profile evenly convex, interrupted only by the promesonotal suture and the metanotal groove. Dorsum of pronotum with anterior margin convex, lateral margin slightly converging to the promesonotal suture. Dorsum of mesonotum trapezoidal; ventral portion of katepisternum at lower level than adjacent surface. Propodeal spiracle small and directed ventrolaterally. Propodeal declivity slightly inclined posteriorly; ventral surface medially projected as an inconspicuous tubercle. Posteroventral propodeal lobe conspicuous (character 67 of Keller [2011]). Metapleural gland orifice opening posteriorly; ventral flap on the metapleural gland opening conspicuous (character 61 of Keller [2011]). Legs relatively short and robust with tarsal claws small and simple. Foreleg with large and rounded coxa; trochanter conspicuous and rounded; femur and tibia thickened; posterior face of the basitarsi with pronounced notch; four basal tarsomeres with a row of small and acute projections on the internal surface. Mid- and hindcoxae with a pair of longitudinal carinae on the dorsal surface; femur and tibia of midleg and hindleg more slender than in foreleg. Tibia of the midleg with a vestigial spur; hindleg with a pectinate spur; posterior face of the basitarsus notched.

Petiole not pedunculated, node well developed. In dorsal view, anteroventral portion of the petiolar tergite anterior to the petiolar spiracle projected as a lateral carina (character 97 of Keller [2011]); lateral margin rounded. Spiracle small and rounded in profile; dorsal profile slightly and uniformly convex. Subpetiolar process conspicuous. Posteroventral angle of process mainly obtuse; anterior and posterior margins parallel or converging apically; posterior margin concave or straight; fenestra present. Petiolar sternite triangular, with rounded corners in ventral view; visible part of helcium rounded. Gaster elongate; prora present as a rounded anterolateral projection. Anterior face of first gastral sternite slightly concave between projections of prora. Deep girdling constriction of second gastral segment present. Sting apparatus well developed.

Queen description. Slightly larger than workers (TL 1.56–2.11 mm). Morphologically similar to workers, with mesosoma well-developed.

Head with compound eyes large, placed at midlength of head; three well-developed ocelli arranged in an equilateral triangle, similar in size.

Pronotal lobe small. Mesoscutum large and trapezoidal; promesonotal suture uniformly continuous in dorsal view; notaui incomplete when present; parapsidal lines and parascutellar carina present; tegulae and axillae flattened. Mesoscutellar disc at the same level of the mesoscutum; rounded. Mesosoma uniformly convex in lateral view. Oblique mesopleural sulcus incomplete, mesopleural pit conspicuous; spiracular sclerite subtriangular. Fully-winged forms. Wing venation as in Yoshimura & Fisher (2012): “Forewing with a small stigma, radial sector absent between M+Rs and 2r-rs, radial sector reaching the costal margin, 2r-rs connected with radial sector distal to pterostigma, 2rs-m present, cu-a located far from junction between media and cubitus; hindwing with radius present, 1 rs-m present, media present apical to 1rs-m”. Four submedian hamuli present.

Petiole and subpetiolar process similar to those of workers; gaster elongated and robust.

Male description. Small to medium-sized (TL 1.60–2.00 mm). Color dark-yellow to brownish-black. Sculpture and pilosity traits similar to those of workers. With well-developed mesosoma.

Head rounded. Posterior margin convex or slightly concave at its median portion; posterior corners convex. Mandible subfalcate; bidentate; apical tooth the longest. Clypeus with anterior margin projecting medially or evenly rounded; frontoclypeal suture smoothly converging to the frons with its median portion truncate or evenly rounded. Thirteen antennomeres; scape short. Compound eye large, occupying almost a quarter of head and set laterally, near to the frontoclypeal suture; three well developed ocelli present and similar in size.

Mesosoma and wings similar to those of queens, complete notaulus always present.

Petiolar node with anterior margin distinctly inclined posteriorly in profile; subpetiolar process with posteroventral margin straight. Gaster elongate and slender. Girdling constriction of the second gastral segment present and shallow.

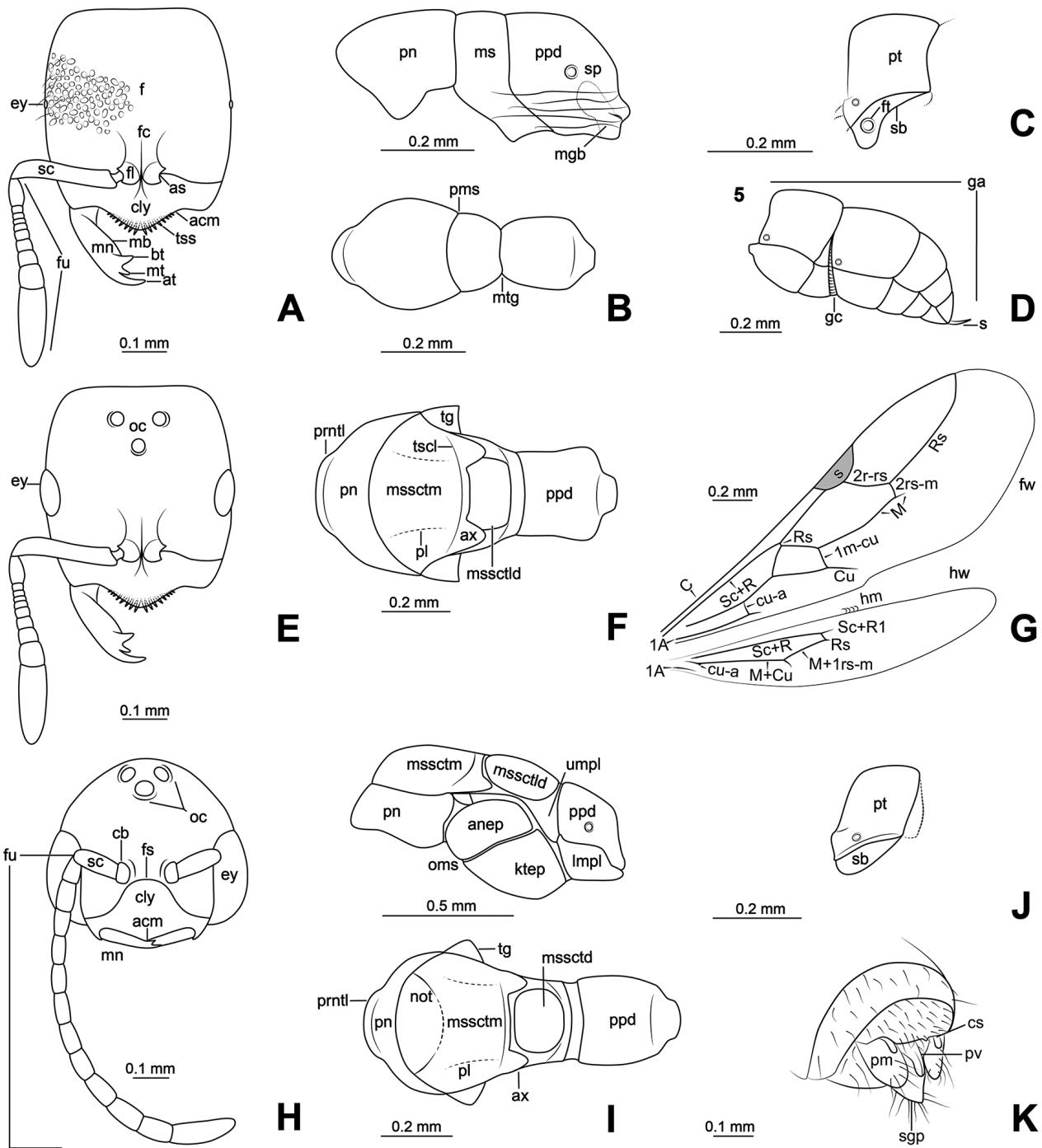
Etymology. Although not specified in the original description, the name refers to the combination of the row of tooth-like stout setae and the shape of the clypeus. From Greek, *prion*: saw and *pelta*: shield (Wheeler & Wheeler 1984).

Comments. *Prionopelta mocsaryi* Forel, 1907, was excluded from this revision. It was described from a specimen putatively from Paraguay but it is actually a mislabeled specimen of *Prionopelta opaca* Emery, 1897, a Melanesian species (Wilson 1958; Brown 1960). *Prionopelta mocsaryi* is currently a junior synonym of *P. opaca* (Bolton 2020). We confirmed the synonymy through the examination of images of the relevant types at AntWeb.org.

Workers and queens of the Neotropical species always have a well-impressed metanotal groove and 11 or 12 antennomeres, while some Old World species can have the metanotal groove indistinct, and fewer than 11 antennomeres (Brown 1960; Arias-Penna 2008; Fernández *et al.* 2019). The worker caste shares a small body size; punctulate, punctate or foveolate sculpturing that is more conspicuous on the head dorsum; erect setae; abundant pubescence; a small genal tooth; and a reduced compound eye. The carinate surface of each tooth-like clypeal seta is clearly noticeable in the images available for the specimen ANTWEB1008581 in AntWeb.org.

A detailed morphological description of the larvae was provided by Wheeler & Wheeler (1952), based on five larvae and two “semipupae” from Colombia. The authors identified the specimens as *P. punctulata*, but we suspect they were misidentified and could have been specimens of *Prionopelta antillana*. We were not able to locate these specimens.

Distribution. Neotropical *Prionopelta* species range from the central portion of USA state of Florida, the Caribbean Islands and Mexico to northwestern Argentina.



acm	anterior clypeal margin	fs	frontoclypeal suture	ms	mesonotum	prntl	pronotal lobe
anep	anepisternum	ft	fenestra	mssctld	mesoscutellar disc	pt	petiole
as	antennal socket	fu	funiculus	mssctm	mesoscutum	pv	penisvalva
at	apical tooth of mandible	fw	forewing	mt	median tooth of mandible	s	sting
ax	axilla	ga	gaster	mtg	metanotal groove	sb	subpetiolar process
cb	condylar bulb	gc	girdling constriction	not	notaulus	sc	scape of antenna
bt	basal tooth of mandible	hm	hamuli	oc	ocelli	sgp	subgenital plate
cly	clypeus	hw	hindwing	oms	oblique mesopleural sulcus	sp	spiracle
cs	cercus	ktep	katepisternum	pl	parapsidal line	tg	tegulum
ey	eye	lmp	lower metapleuron	ppd	paramere	tscl	transscutal line
f	frons	mb	basal margin of mandible	pms	promesonal suture	tss	tooth-like stout seta
fc	frontal carina	mgb	metapleural gland bulla	pn	pronotum	ump	upper metapleuron
fl	frontal lobe	mn	mandible	ppd	propodeum		

FIGURE 1. Glossary for basic external morphology of *Prionopelta*. A–D. Worker (head, mesosoma, petiole, gaster); E–G. Queen (head, mesosoma, wings); H–K. Male (head, mesosoma, petiole, external genitalia).

Identification key for the Neotropical species of *Prionopelta* (workers and queens)

(Note: *Prionopelta* are relatively small to minute ants, thus, an appropriate stereoscope with a zoom of at least 80X and an indirect cold-light system is recommended; see Methods).

- 1. Eleven antennomeres 2
- Twelve antennomeres 4
- 2. Clypeus strongly projecting medially; subpetiolar process with margins apically convergent, rendering the process subtriangular or falciform; lateral portion of frons with punctulate sculpturing, perceived as shallow pin-prick depressions of the integument (Fig. 2A) (Brazil to Argentina) *P. punctulata*
- Clypeus slightly projecting medially or evenly rounded; subpetiolar process with margins parallel or subparallel, rendering the process subquadrate or forming a relatively broad lobe; lateral portion of frons with punctate sculpturing, perceived as moderately deep pin-prick depressions of the integument (Fig. 2B) 3

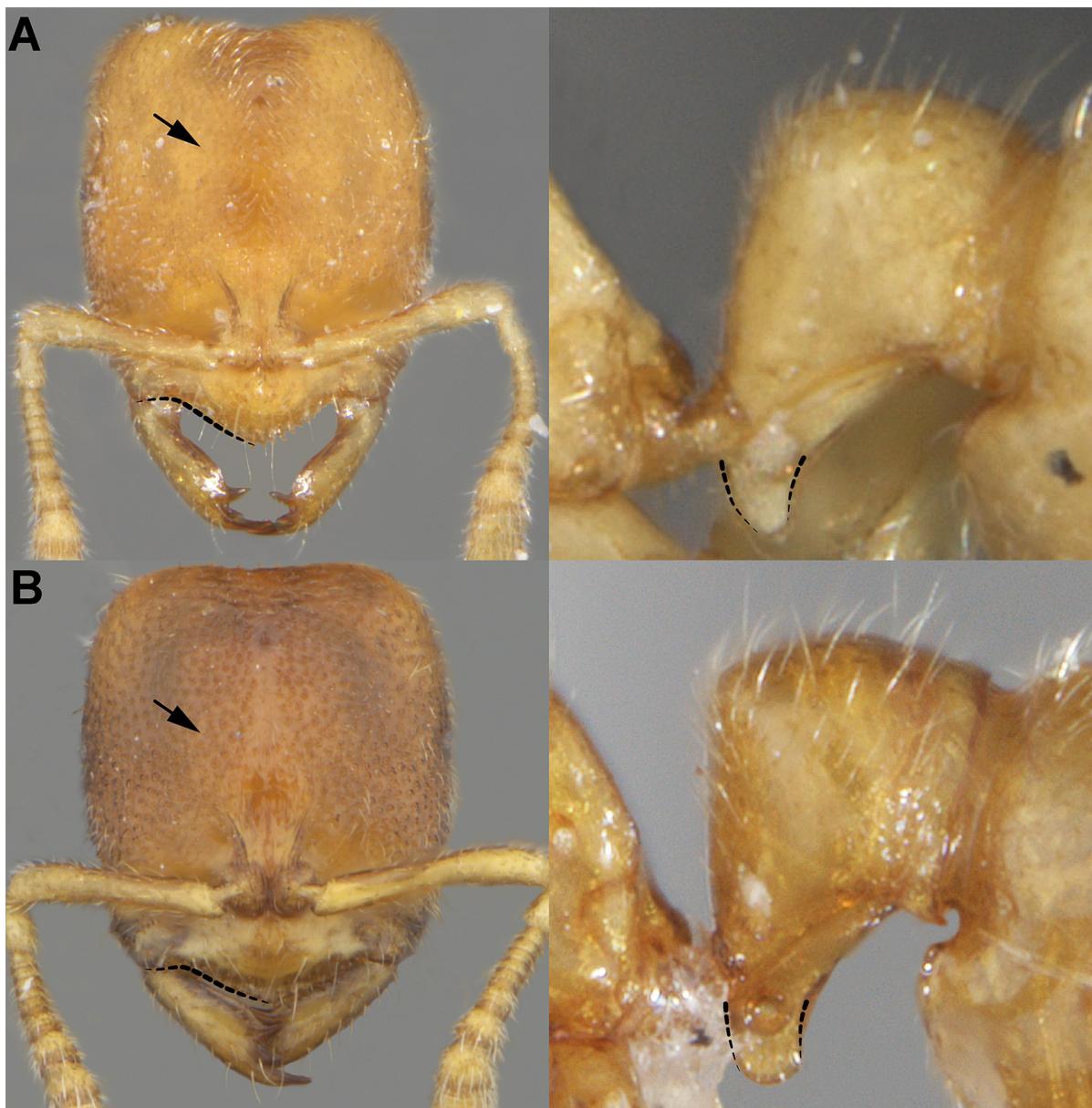


FIGURE 2. Detail of clypeus, lateral portion of frons and subpetiolar process.

- 3. Posteroventral angle of the subpetiolar process obtuse; worker T1W greater than 0.40mm (Fig. 3A) (Brazil) *P. menininha* sp. n.
- Posteroventral angle of the subpetiolar process acute; worker T1W less than 0.40mm (Fig. 3B) (Mexico) *P. tapatia* sp. n.

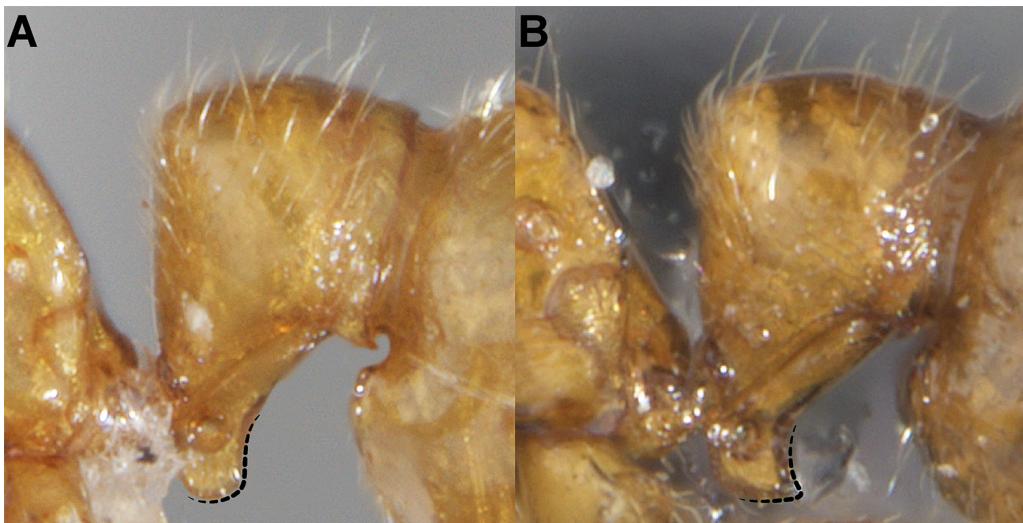


FIGURE 3. Detail of posteroventral angle of the subpetiolar process.

- 4. Lateral portion of frons with foveolate sculpturing, perceived as deep flat-bottomed depressions of the integument; interspaces between fovea with the appearance of small raised margins, caused by the sculpturing proximity (Fig. 4A) 5
- Lateral portion of frons with punctulate to punctate sculpturing, perceived as shallow to moderately deep pin-prick depressions of the integument; interspaces between puncta flat and shinier, sculpturing more spaced (Fig. 4B) 6

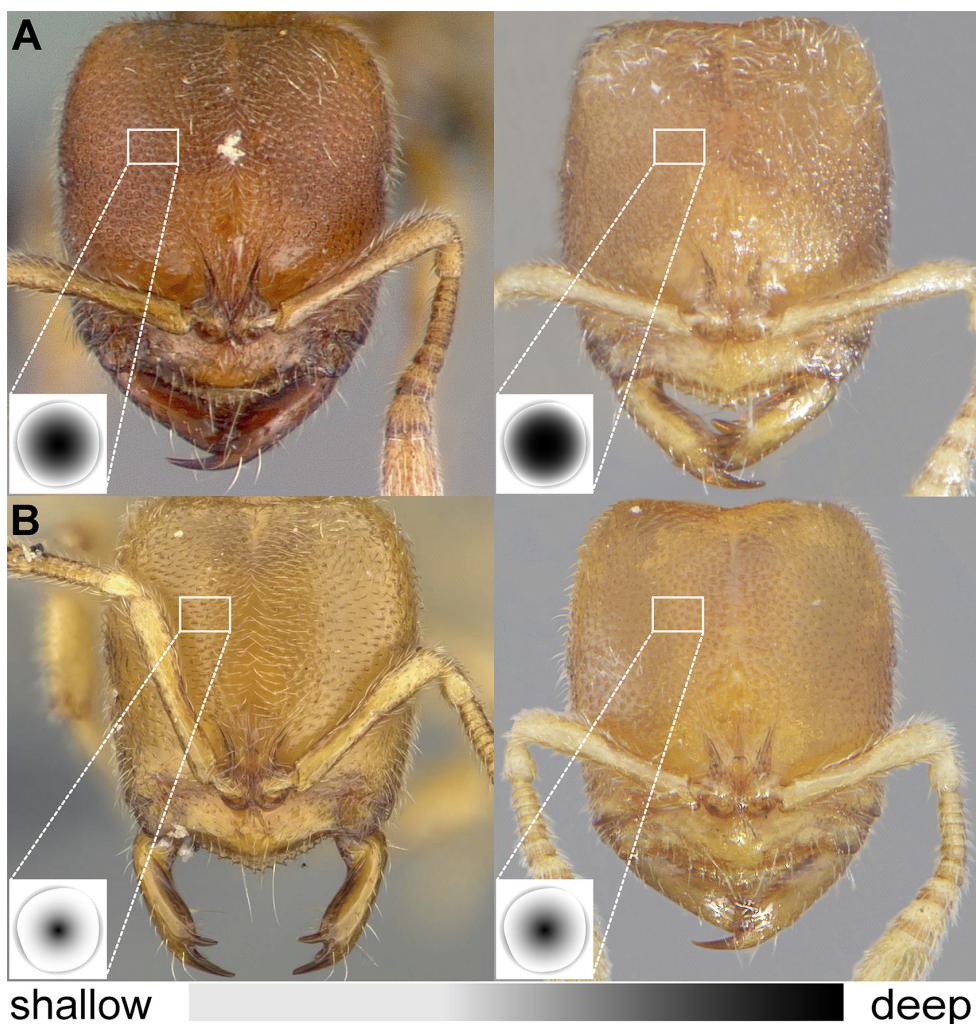


FIGURE 4. Detail of the sculpturing of lateral portion of frons. A (left). Modified from AntWeb.org image by April Nobile, specimen: CASENT0039774. B (left). Modified from AntWeb.org image by Michele Esposito, specimen: CASENT0767588.

5. Worker HL less than 0.50mm; posterior margin of subpetiolar process straight; foveae on lateral portion of frons nearly confluent (Fig. 5A) (Colombia and Brazil) *P. minuta* sp. n.
- Worker HL greater than or equal to 0.50mm; posterior margin of subpetiolar process concave; foveae on lateral portion of frons moderately spaced, interspaces shiny (Fig. 5B) (Mexico to Guyana) *P. modesta*

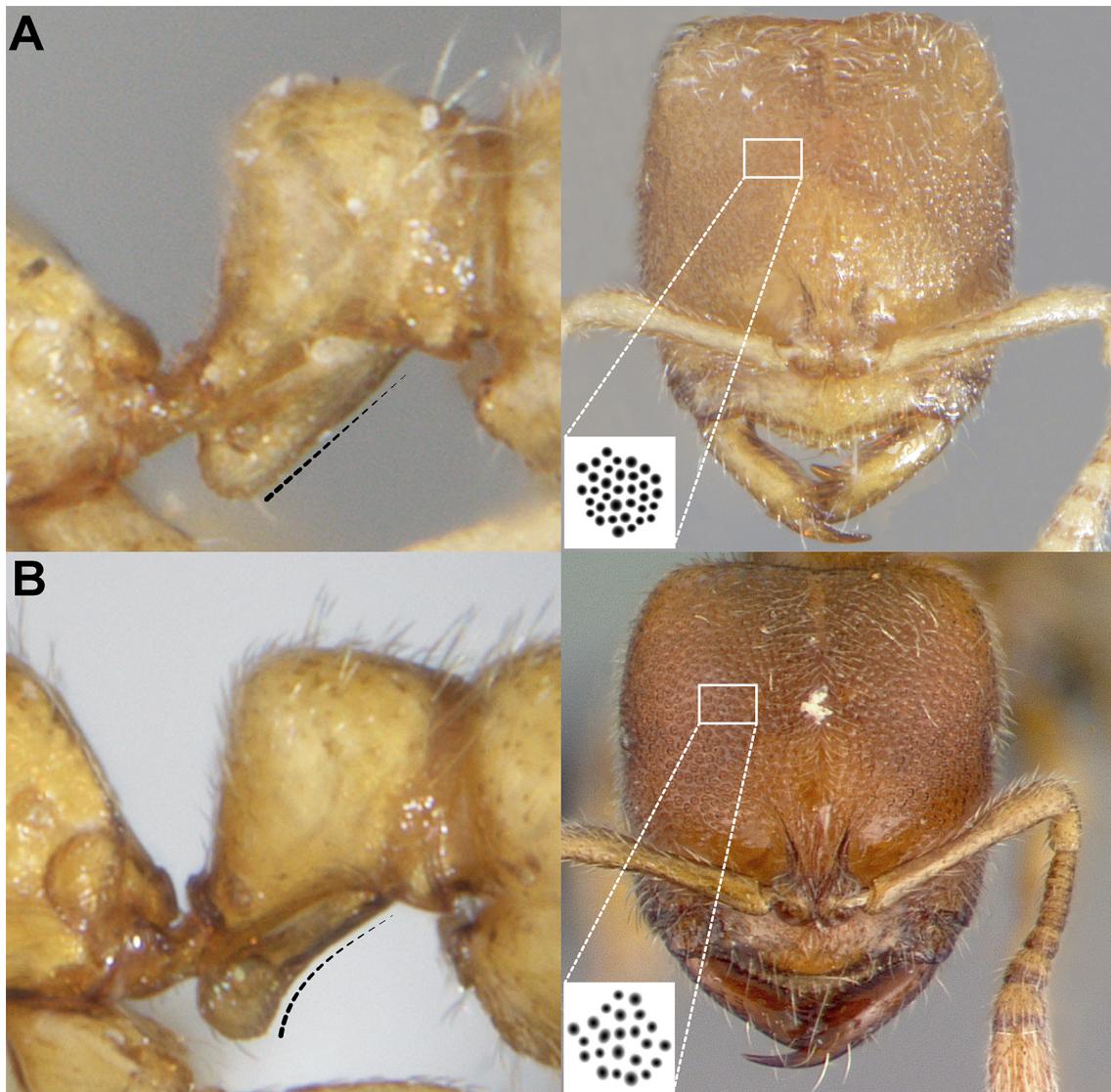


FIGURE 5. Detail of posterior margin of subpetiolar process and the sculpturing of lateral portion of frons. B (right). Modified from AntWeb.org image by April Nobile, specimen: CASENT0039774.

6. Puncta on lateral portion of frons and pubescence on head dorsum sparse, rendering the integument shiny; clypeus slightly projecting medially (Fig. 6A) 7
- Puncta on lateral portion of frons and pubescence on head dorsum more closely spaced, rendering the integument more opaque; clypeus evenly rounded (Fig. 6B) (Mexico to Brazil) *P. dubia* sp. n.

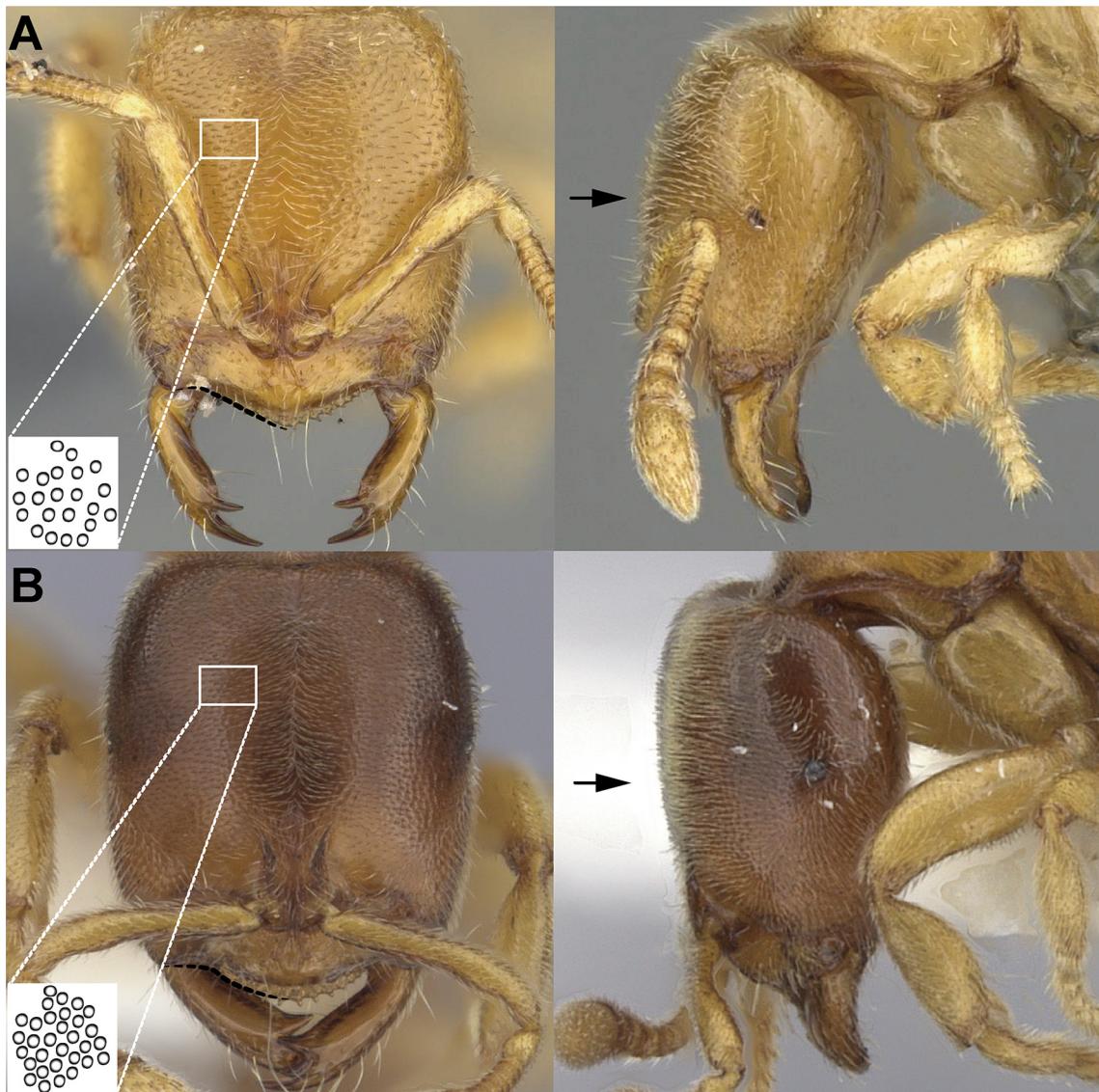


FIGURE 6. Detail of clypeus, sculpturing of lateral portion of frons and pubescence of head. A. Modified from AntWeb.org image by Michele Esposito, specimen: CASENT0767588 B (left). Modified from AntWeb.org images by Will Ericson, specimen: CASENT0260460.

7. Puncta on lateral portion of frons usually shallow; subpetiolar process with margins parallel or subparallel, rendering the process subquadrate or forming a relatively broad lobe (Fig. 7A) (Honduras to Brazil) *P. amabilis*
- Puncta on lateral portion of frons usually moderately deep; subpetiolar process usually with margins apically convergent, rendering the process subtriangular or falciform (Fig. 7B) (USA and Lesser Antilles to Brazil) *P. antillana*

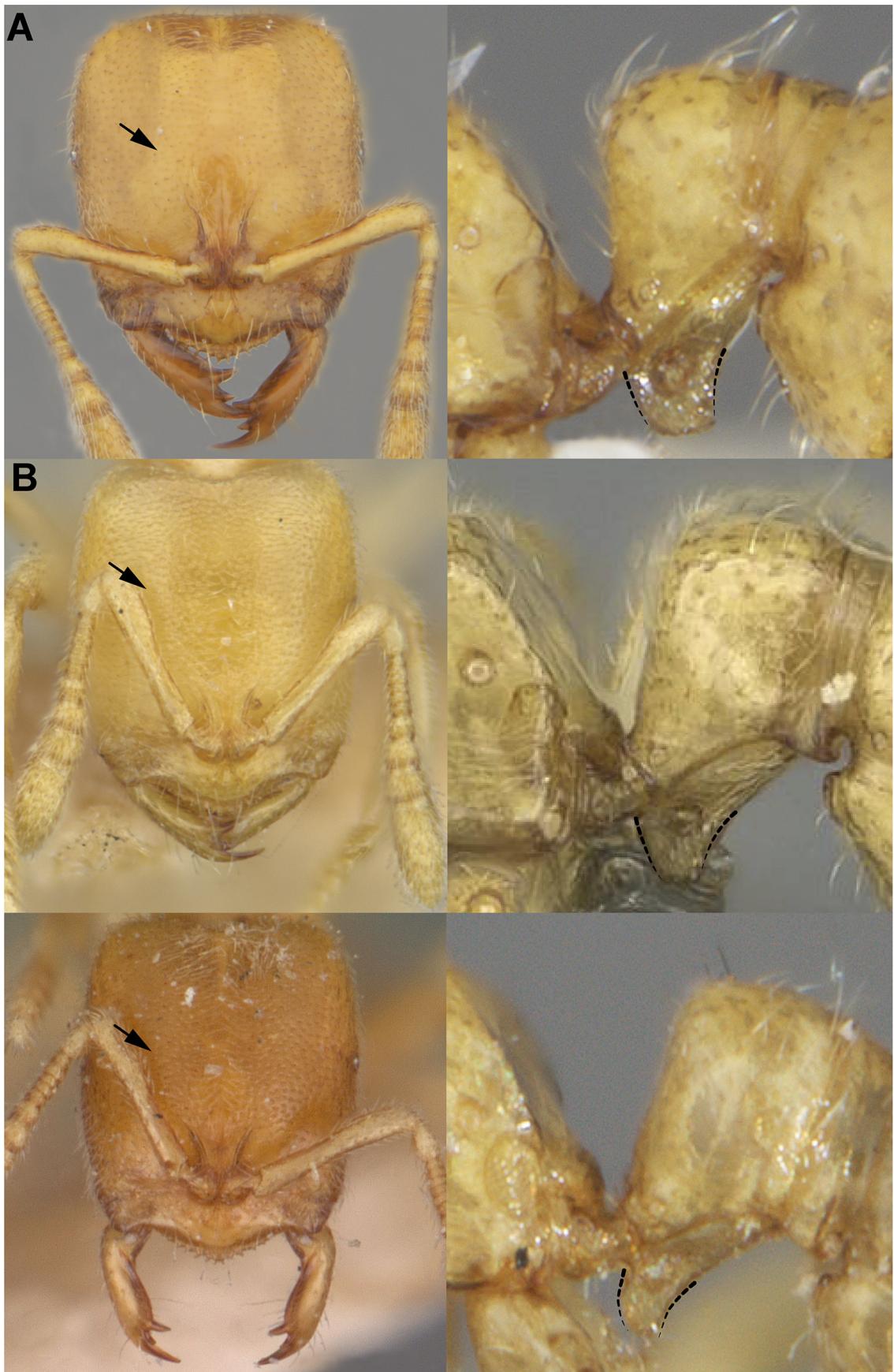


FIGURE 7. Sculpturing of lateral portion of frons and detail of subpetiolar process. B (left/top). Modified from image taken by Gabriela Camacho, specimen: MCZ-ENT20385; B (right/top). Modified from AntWeb.org image by Michele Esposito, specimen: CASENT0767588; B. (left/bottom). Modified from AntWeb.org image by April Nobile, specimen: CASENT0102529.

Identification key for Neotropical *Prionopelta* species (males)

(Note: The identification key for males includes only four out of the eight Neotropical species of *Prionopelta*)

1. Anterior clypeal margin medially projected (Fig. 8A, B) 2
- Anterior clypeal margin medially rounded (Fig. 8C, D) 3
2. Head dorsum with sparse punctulate sculpture, relatively shiny (Fig. 8A) (Honduras to Brazil) *P. amabilis*
- Head dorsum with dense punctulate sculpture, relatively opaque (Fig. 8B) (Brazil to Argentina) *P. punctulata*
3. Frontoclypeal suture relatively trapezoidal, truncate medially (Fig. 8C) (Mexico to Guyana) *P. modesta*
- Frontoclypeal suture evenly rounded (Fig. 8D) (Mexico to Brazil) *P. dubia* sp. n.

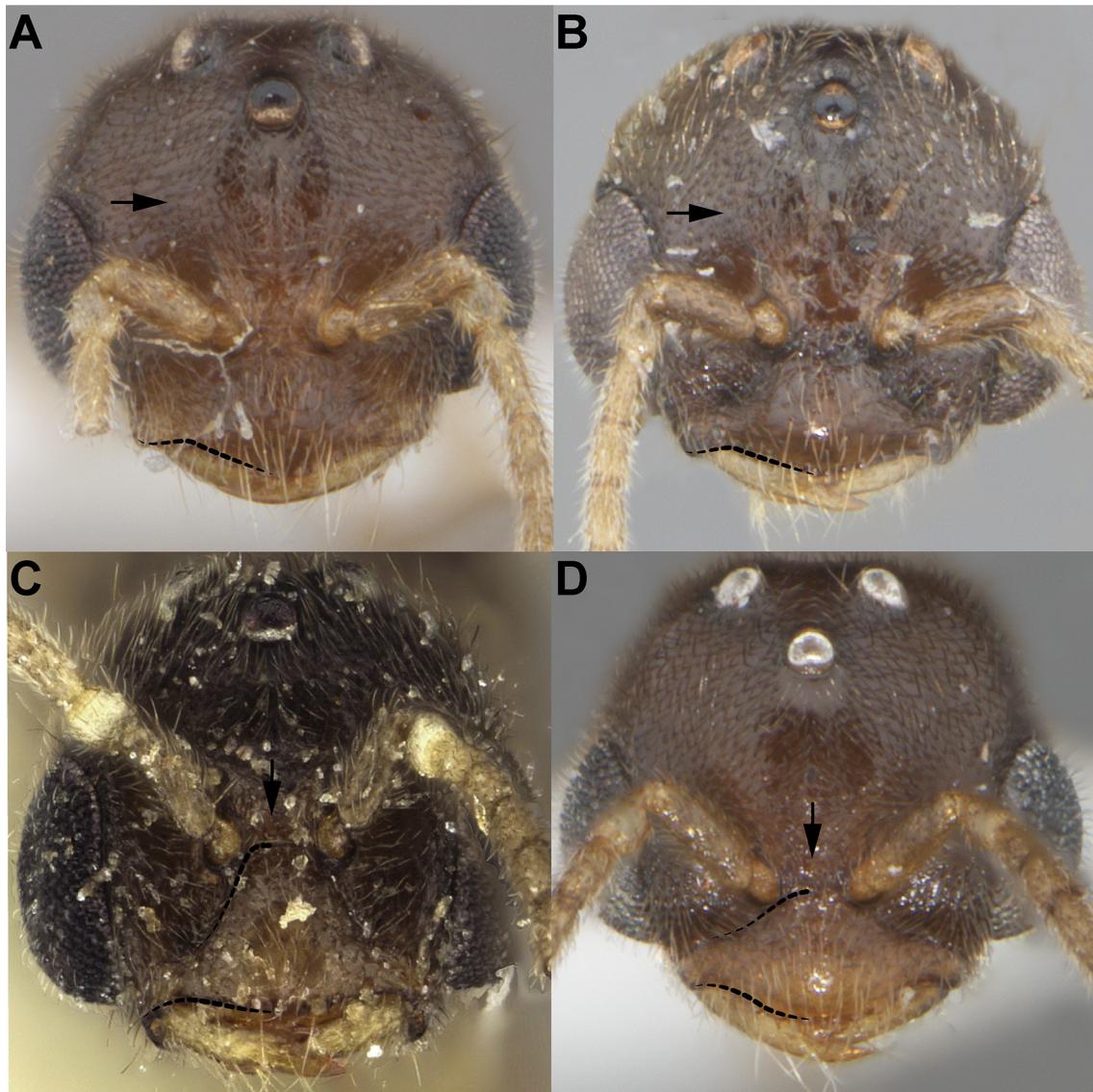


FIGURE 8. A, D. Detail of anterior clypeal margin in full-face view; A, B. Head dorsum sculpturing; C, D. Frontoclypeal suture; C. Modified from AntWeb.org image by Will Ericson, specimen: CASENT0615793.

Species Accounts

Prionopelta amabilis Borgmeier, 1949

Figures 9–13, 35A

Prionopelta amabilis Borgmeier, 1949: 203, figs. 3–5. Holotype worker: COSTA RICA: Hamburg Farm, F. Nevermann leg., MCZT-34787 [MCZ] (examined by images).

Diagnosis. Median tooth of mandible shorter than basal tooth; anterior clypeal margin slightly projected medially; lateral portion of frons with sparse punctulate sculpturing, with interspaces flat and shiny, corresponding to three or more puncture diameters; head with sparse pubescence in dorsal-oblique view. Twelve antennomeres. Subpetiolar process with margins parallel or subparallel.

Worker measurements (n=28). HL 0.48–0.60; HW 0.42–0.52; SL 0.24–0.34; WL 0.54–0.71; PrL 0.22–0.30; PrW 0.28–0.36; PetNL 0.12–0.18; PetW 0.20–0.30; PetH 0.14–0.22; PetL 0.14–0.20; T1L 0.19–0.28; T1W 0.32–0.42; TL 1.40–1.74; CI 78–89; SI 50–69; PetI 137–191; PetHI 87–150; PetWI 122–171.

Queen measurements (n=9). HL 0.65–0.68; HW 0.55–0.57; SL 0.30–0.36; WL 0.89–96; PrL 0.17–0.18; PrW 0.38–0.47; PetNL 0.20–0.22; PetW 0.35–0.37; PetH 0.24–0.28; PetL 0.21–0.22; T1L 0.34–0.36; T1W 0.52–0.57; TL 1.86–2.11; CI 81–87; SI 52–65; PetI 159–185; PetHI 114–127; PetWI 166–168.

Male measurements (n=1). HL 0.55; HW 0.60; SL 0.16; WL 0.96; PrL 0.04; PrW 0.15; PetNL 0.16; PetW 0.26; PetH 0.18; PetL 0.15; T1L 0.34; T1W 0.45; TL 2.00; CI 109; SI 26; PetI 162; PetHI 120; PetWI 173.

Worker description. Body yellow to light brown. Integument covered mainly by sparse punctulate sculpturing; space between the punctures of lateral portions of frons corresponding to three or more puncture diameters in full-face view.

Head longer than broad; length of median tooth of mandible shorter than basal tooth; basal margin of mandible convex. Anterior clypeal margin slightly projected medially. Twelve antennomeres; antennomeres 1–4 separated by deep constrictions. Eye placed immediately posterior to the head midlength.

Pronotum broader than long. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to almost one spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to two or three spiracular diameters.

Petiolar node as long as high. Subpetiolar process subquadrate or subtriangular, with its anterior and posterior margins subparallel or apically convergent respectively; posterior margin concave; posteroventral angle acute.

Queen. Distance between the propodeal spiracle and the propodeal dorsum equal to two spiracular diameters.

Male. Anterior clypeal margin medially projected, frontoclypeal suture medially rounded; head dorsum with sparse punctulate sculpture, relatively shiny. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to one spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to almost two spiracular diameters.

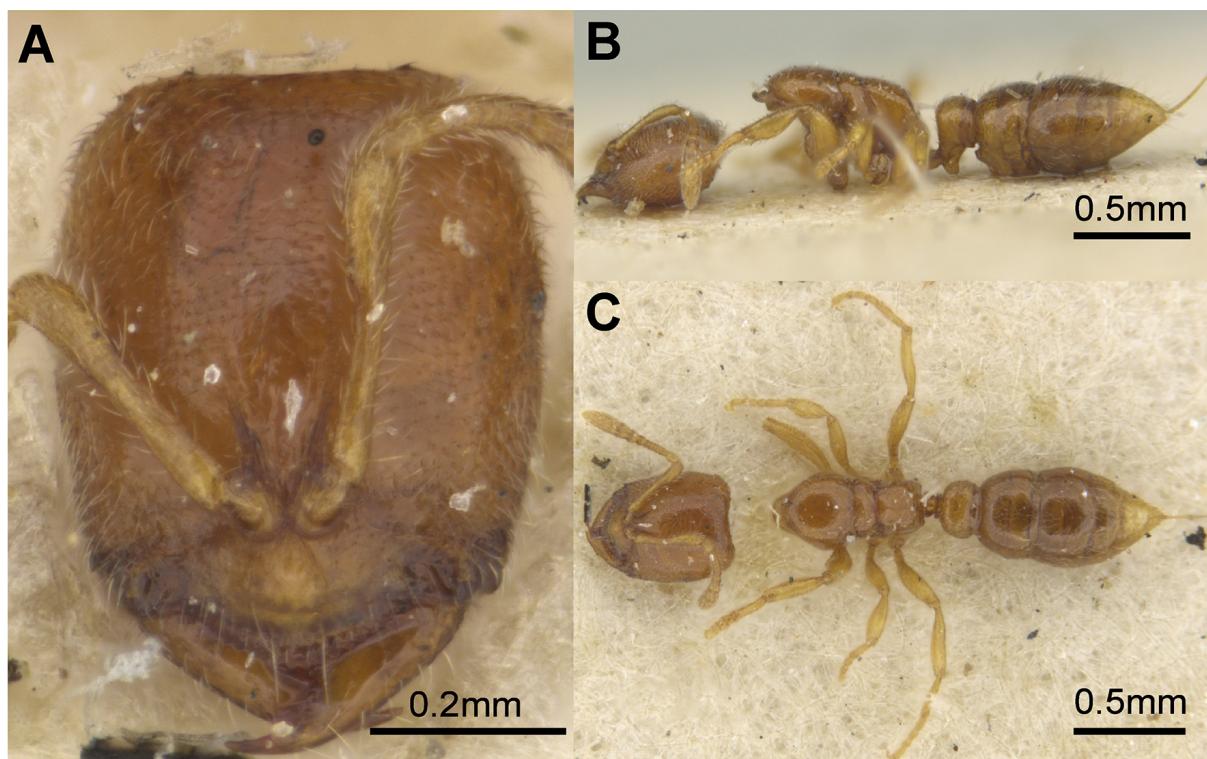


FIGURE 9. Holotype worker of *Prionopelta amabilis* (Costa Rica). A. Full-face view; B. Lateral view; C. Dorsal view. Modified from images taken by Gabriela Camacho and Alexandre Ferreira, specimen: MCZ-ENT34787.

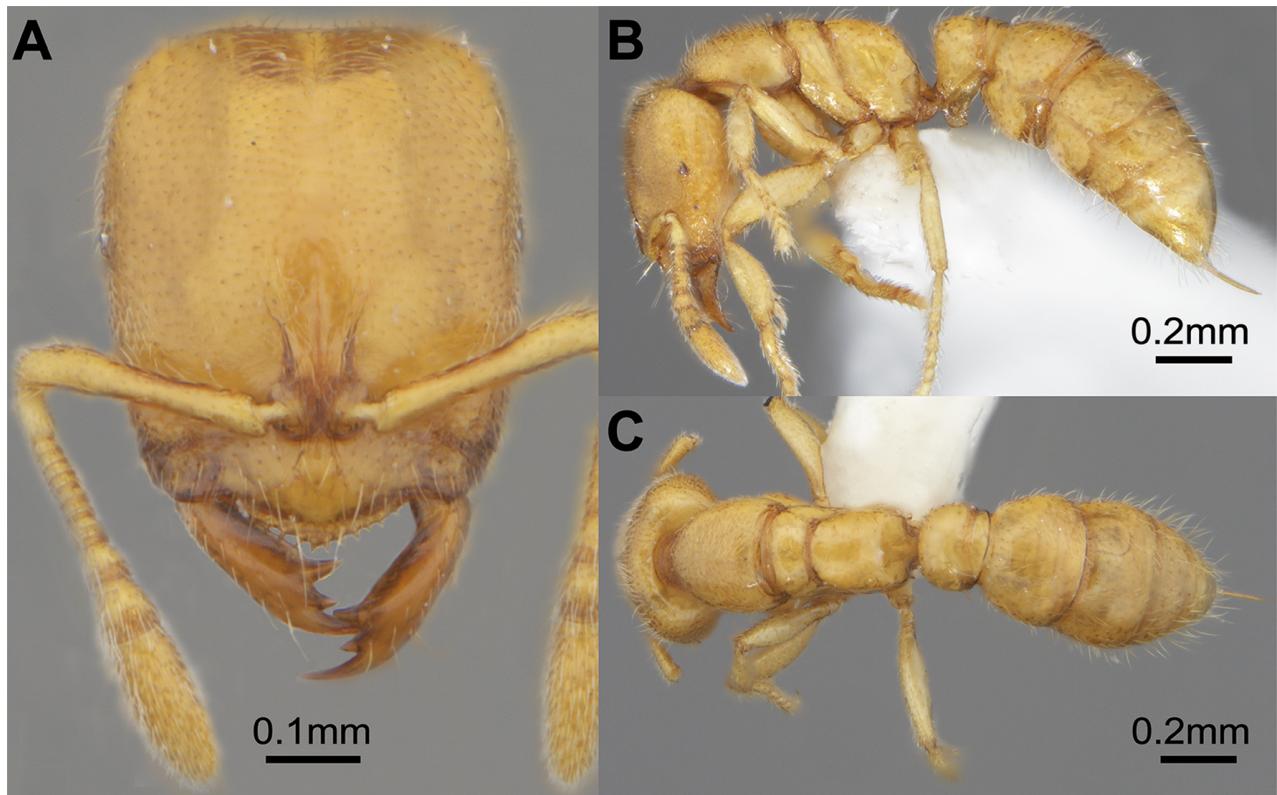


FIGURE 10. Worker of *Prionopelta amabilis* (Costa Rica, Limón). A. Full-face view; B. Lateral view; C. Dorsal view. Specimen: CASENT0632086.

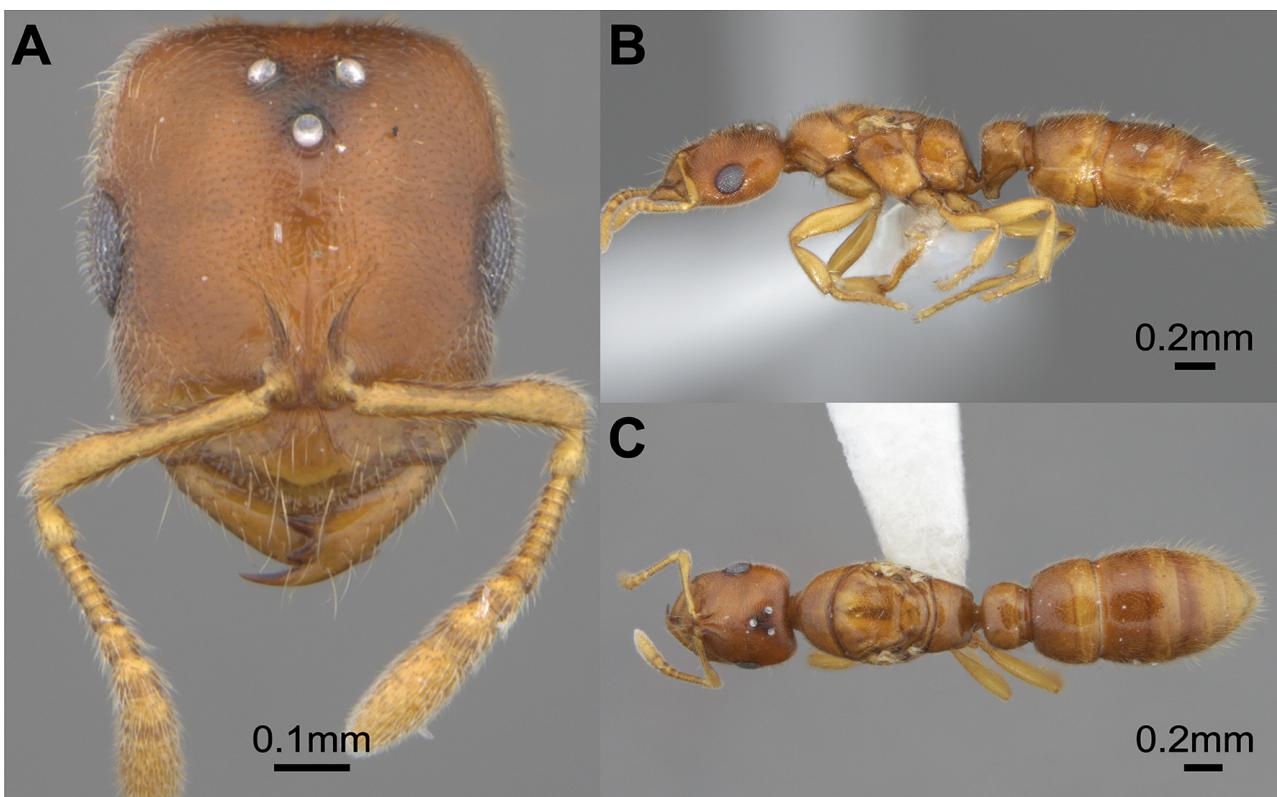


FIGURE 11. Queen of *Prionopelta amabilis* (Honduras, Gracias a Dios). A. Full-face view; B. Lateral view; C. Dorsal view. Specimen: CASENT0612386.

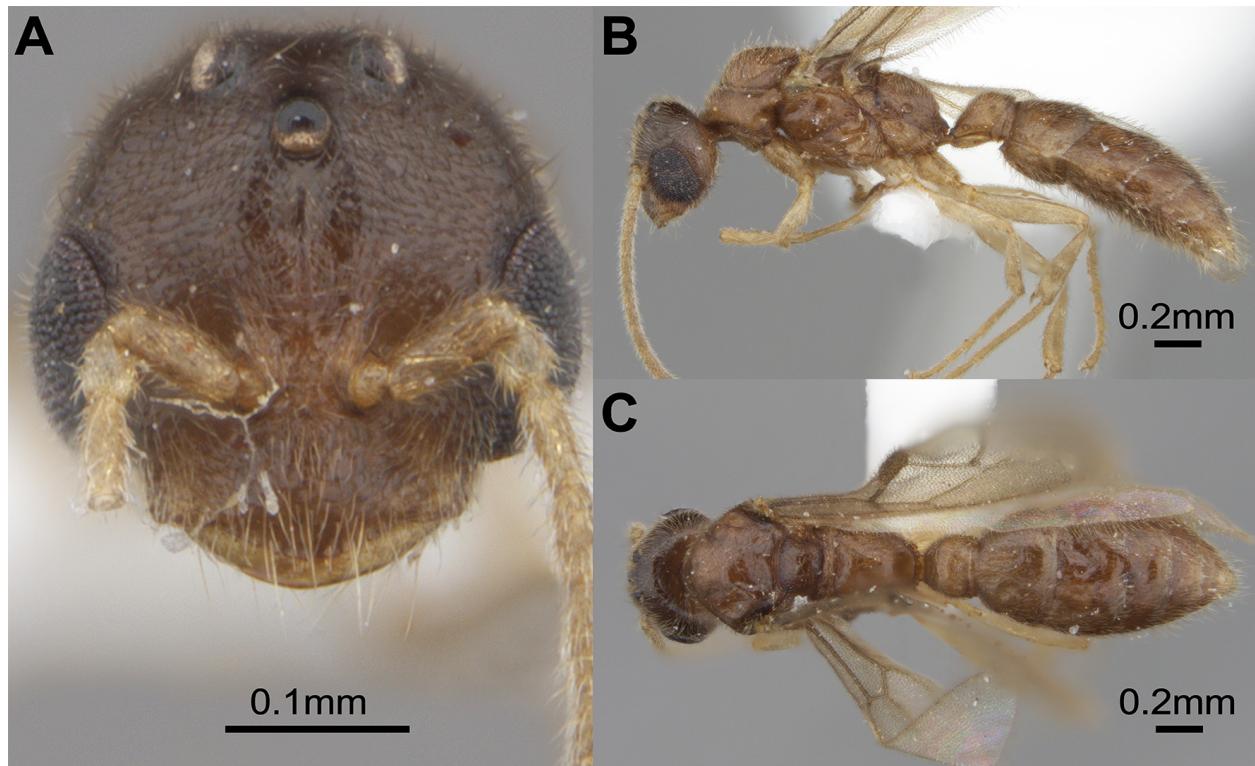


FIGURE 12. Male of *Prionopelta amabilis* (Brazil, Bahia). A. Full-face view; B. Lateral view; C. Dorsal view.

Etymology. Unknown.

Distribution (Fig. 35A). *Prionopelta amabilis* is known from the east coast of Honduras to south Brazil.

Comments. The limits between *P. antillana* and *P. amabilis* have been one of the main taxonomic problems of the genus in the Neotropics, given their morphological similarity and sympatric distribution. South American specimens of *P. amabilis* have been historically considered probable morphological variations of *P. antillana*. In Central America, material corresponding to our new species *P. dubia* sp. n. has been routinely misidentified as *P. amabilis* or *P. antillana*.

Here, the differences among the species are finally clarified, mainly in terms of density of pubescence and sculpturing, shape of clypeus, comparative length between the median and basal tooth of the mandible, and convergence of the subpetiolar process margins. In *P. amabilis*, the pubescence is sparse, the sculpture is shallow, the anterior clypeal margin is slightly projecting medially (somewhat triangular), the median tooth of the mandible is distinctly shorter than the basal tooth, and the margins of the subpetiolar process are parallel or subparallel. *Prionopelta dubia* sp. n has dense pubescence, the sculpture is shallow, the anterior clypeal margin is evenly rounded, the lengths of the median and basal teeth of mandible are similar, and the margins of the subpetiolar process are subparallel or parallel. *Prionopelta antillana* has the anterior clypeal margin slightly projecting medially, the median tooth of the mandible is distinctly shorter than the basal tooth, and the margins of the subpetiolar process are apically convergent.

Natural history. The species is mainly known from litter samples collected in tropical forests; reported at elevations of 50–960m. They nest in rotting logs and colonies may have large numbers of workers.

Hölldobler & Wilson (1986) and Hölldobler *et al.* (1992) observed captive colonies collected during the dry season in well-developed secondary rainforest of Costa Rica.

In the 1986 study, the authors censused and excavated colonies, observed the behavior of the ants and conducted a “cafeteria” experiment to study dietary choice, which consisted in offering living arthropods from leaf litter and rotting wood from the sites nearby original *Prionopelta* nests to the captive ants. Two large colonies were carefully excavated. The total population of the first colony was: one queen swollen with eggs, 709 workers, between 100 and 200 eggs, 82 larvae and 126 pupae; with the emergence of alate queens from the cocoons two days after the capture of the colony. The second population counted: a dealate queen, 282 workers, 100 eggs, 76 larvae and 264 pupae. Authors considered that the colonies are both monogynous and polydomous, discrete and kept apart by nestmate recognition.

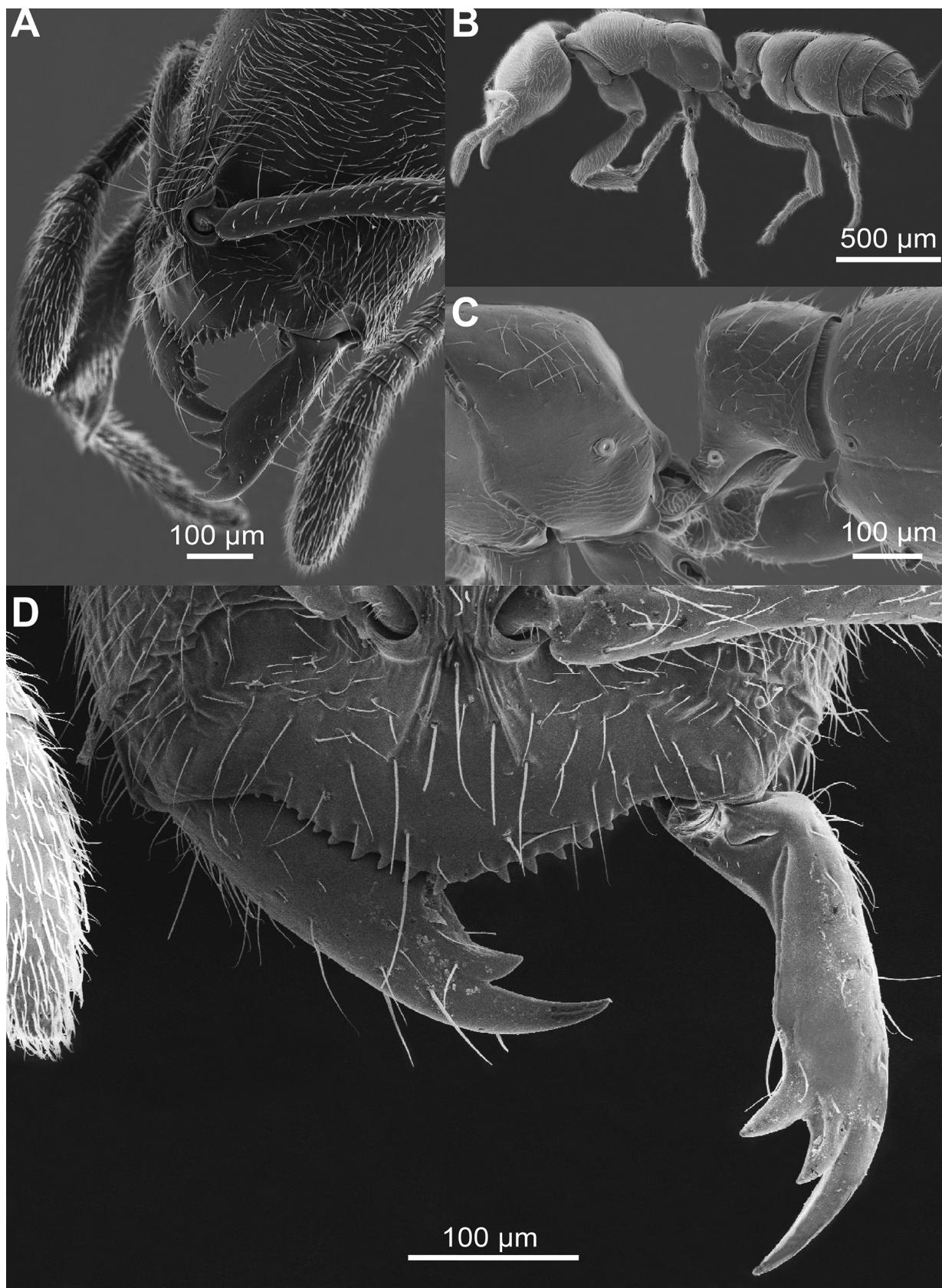


FIGURE 13. Worker of *Prionopelta amabilis* (Colombia, Meta). A. Head dorsum, note the sculpturing and pilosity; B. Habitus; C. Detail of subpetiolar process, also note the ventral flap on the metapleural gland opening; D. Detail of the row of tooth-like stout setae and median tooth of mandible.

Cafeteria trials suggested a preference for campodeid diplurans as prey. The authors offered land snails, isopods, spiders, ricinuleans, mites, phalangids, pseudoscorpions, geophilomorph centipedes, millipedes, pauropods, campodeid and japygid diplurans, lepismatid and machilid thysanurans, entomobryomorph collembolans, kalotermitid and nasutitermitine termite nymphs and workers, zorapteran nymphs and adults, hemipteran, tettigonid, earwig and gryllid nymphs as well as larvae and adults of ants and beetles. *Prionopelta amabilis* was capable of kill most of the groups cited above in two or three minutes, only ignoring the snails, spiders, phalangids, ricinuleans and millipedes.

They affirm that the species has a rudimentary but well-marked division of labor based on age, correlated in turn with early rise in ovarian development and a decline as the workers turn increasingly to foraging. Also, the authors divided the workers in three classes based in age and the increasing of body pigmentation: light callow, medium callow and fully pigmented. Additionally, they provided interesting notes regarding grooming, trophallaxis, trophic eggs, brood care, alarm and what is called the phenomena of “wall-papering” and “foot-dragging”.

The grooming among workers and self-grooming was less frequent than from workers to queen. No evidence of adult transport nor trophallaxis was found. Workers can have well-developed eggs and older workers frequently offered eggs to the queen, with no report of she feeding from any other manner. Workers were observed segregating eggs, small larvae, large larvae and pupae into separate piles; complementarily to this, the authors observed a “wall-papering” phenomenon, where they inferred that cocoon layers present in the walls of the galleries housing pupae served to keep them from growing to moist, contrary to the galleries occupied by the queen, eggs, larvae and resting group of workers. Workers rapidly responded to air currents and sudden illumination with a body vibration, also observed in the first approach to the queen and sometimes between workers, but the authors did not find any alarm pheromone. Nevertheless, when the workers were placed in a strange surface, they observed that the ant extended the legs backwards and dragged the tarsi for short intervals. This “foot-dragging” phenomenon was thought to be probably associated with trail laying or home range.

In the 1992 study, the “foot-dragging” phenomenon was further explored. One large colony was collected, containing two queens with active ovaries and filled spermatheca, more than 500 workers and many larvae and pupae. Complementing the behavior associated with the phenomenon described above, a rapid vertical shaking of the body performed by the workers was frequently observed.

Observations of the ants’ behavior as well as histology of front, middle and hindlegs were made, and the findings suggested that *P. amabilis* employ recruitment communication, somewhat associated with the “foot-dragging” phenomenon and the body shaking. The authors reported the presence of basitarsal glands in the hindlegs of workers and queens of the species, and demonstrate that their secretions are employed during recruitment to food sources and to new nesting sites; this is made during the perform of mechanical signals cited above, which apparently stimulates the nestmates to follow the trail.

Prionopelta amabilis workers have been seen “walking under the fungus garden of *Apterostigma* sp., in the ground under a large rotten log” (Lívia Pires do Prado pers. comm., #LPP_303).

Additional material examined (2409 specimens). **BOLIVIA:** Beni: Est. Biol. Beni, 42km, E. San Borja, 14°48'S 66°23'W, 210m, 5.ix.1987, P.S. Ward col., #9085-20, sifted litter (leaf mold, rotten wood, trop. moist forest), #9085-20, CASENT0863191 (3 workers) [PSWC]. **BRAZIL:** Acre: Mâncio Lima, PN Serra do Divisor, 07°26'17.19"S 73°39'27.39"W, 245m, 15-18.ix.2016, R.M. Feitosa, T.S. Silva & A.C. Ferreira cols., Winkler (1 worker) [DZUP]. Alagoas: Quebrângulo-wc, 0919s3628w, 31.vii.1999, Santos J.R.M. col. (6 workers) [CEPEC]. Amapá: Ferreira Gomes, FLONA AMAPÁ, 00°58'28.8"N 51°38'44.6"W, 02-06.ix.2016, Almeida R.P.S. & Siqueira E.L.S. cols., Winkler (2 workers) [MPEG]. Bahia: Colônia de Una, 15°15'42"S 39°09'12"W, 12.vi.1997, Carmo J.R.S. col. (1 worker) [CEPEC]. Faz. Boa Esperança, Camamu, 9.iii.1992, Silveira J.E. col., #4517 (2 workers) [DZUP]. Ibicaraí, km 41, 14537s 0392901w, 21.xi.1998, Santos J.R.M. col., (2 workers, 1 queen) [CEPEC]. Iguai, 14°38'38"S 40°09'12"W, 907m, 2011-2012, Santos R. e cols., Winkler, submontane, ombrophylous (3 workers, 1 male) [CEPEC]. Ilhéus, Banco do Pedro, Mata W-A23, 144051s 0391524w, 12.i.1998, Santos J.R.M. & Carmo J.C.S. cols. (1 male) [CEPEC]; same data, CEPEC, ii.1998, Exp. JDMaje98, #5218 (1 worker) [CEPEC]. Faz. Nova Esperança, 11.ix.1997, L.S. Ramos col. (3 workers) [DZUP]. Mata da Boa Esperança, 14°47'47"S 09°03'56"W, 09.xi.2000, Santos J.R.M. col., Winkler (1 worker, 1 queen) [MZSP]; (1 worker) [DZUP]. Itabuna, Mata Atlântica, 14°27'50.7"S 39°10'26.3"W, 19.i.1998, Santos J.R.M. col. (2 workers, 1 queen) [UFGD]. Itacaré-Taboquinha, 20.xii.1996, Santos J.R.M. col. (1 worker) [CEPEC]. Jussari, 15°08'26"S 39°31'29"W, 26.v.1999, J.C.S. Carmo & J.R.M. Santos cols. (2 workers, 1 queen) [DZUP]. Mata São João, Reserva Sapiranga, 12°33'29.3"S

33°02'35.2"S, 21-28.vii.2001, Silva R.R & Brandão C.R.F. cols., Winkler (1 worker, 1 queen) [DZUP]; (20 workers) [MZSP]. Nilo Peçanha, 13°38'58"S 39°12'37"W, 195m, 2011-2012, Santos R. e cols., Winkler, dense ombrophylous (1 worker) [CEPEC]. Olivença, Mata Atlântica, 14°59'13"S 39°00'4.2"W, 16.xi.1996, Santos J.R.M. col. (2 workers) [UFGD]. Porto Seguro, E.E. Pau Brasil, 16°23'33"S 39°10'99"W, 16.vi.2000, Santos JRM, Soares JC cols., Winkler (1 worker) [MZSP]. Taboquinha, 06-20.xii.1996, Santos J.R.M. col. (2 queens) [CEPEC]. Una, 15°15'78"S 39°03'13"W, 04.v.1998, Carmo J.C.S. col., #5240 (1 worker) [CEPEC]. Una-EDJABE, 07-12.viii.1994, S. Lacau col. (1 worker) [DZUP]. Wenceslau Guimarães, S13°33'14"S W39°42'07", 485m, 2011-2012, Santos R. e cols., Winkler, submontane, ombrophylous (1 worker, 1 queen) [CEPEC]. **Goiás:** 16.xii.2005, Gustavo col., IDSC (Direito) 11, (2 workers) [DZUP]. Campinaçu, Serra da Mesa, 13°52'S 48°23'W, 18.ii-2.iii.1996, Silvestre, Brandão & Yamamoto col., peneira (1 queen) [MZSP]. Campo Limpio, Faz. Conceição, 16°19'51.0"S 49°09'49.2"W, 01-07.vii.2005, Silva R.R. & Feitosa R.M. cols., Winkler (14 workers) [MZSP]; same data, 20-24.i.2005, Silva R.R. col. (30 workers) [MZSP]. Cavalcante, Serra da Contenda, 13°42'03.6"S 47°21'51.9"W, 16.x.2004, Silva R.R. & Dietz B.H. cols., Winkler (5 workers) [MZSP]. Colinas do Sul, Serra da Mesa, 14°01'S 48°12'W, 2-15.xii.1995, Silvestre, Dietz & Campaner cols., cerrado (1 worker) [MZSP]. Jataí, xii.1972, F.M. Oliveira col., #8936 (2 males) [MZSP]. Faz. Aceiro, 31.x.1962, Exp. Dep. Zool. (4 workers, 2 queens) [MZSP]; (6 workers, 1 queen, 1 male) [DZUP]. Faz. Ariranha, 17°57'34"S 51°51'34"W, 797m, 11.ii.2009, G.G. Santos col., Mini-Winkler (217 workers) [DZUP]. Faz. Lageado, 17°49'51"S 51°31'21"W, 856m, 19.ii.2009, G.G. Santos col., Mini-Winkler (111 workers, 10 queens) [DZUP]; same data, 21.ii.2009 (3 workers) [INPA]. Faz. Leão, 17°48'24"S 51°41'41"W, 843m, 21.ii.2009, G.G. Santos col., Mini-Winkler (3 workers) [DZUP]; same data, 861m (125 workers, 13 queens) [DZUP]; (2 workers, 1 queen) [INPA]. Faz. Primavera, 17°51'54"S 51°39'56"W, 817m, 09.xi.2008, G.G. Santos col., Mini-Winkler (77 workers, 2 queens) [DZUP]; (5 workers, 1 queen) [INPA]. Faz. Rio Paraíso, 17°42'48"S 51°37'39"W, 02.xi.2011, Diniz col., Winkler A1: mata semidecidual (95 workers) [DZUP]; same data, 17°42'56"S 51°37'45"W, 28.ix.2009 (138 workers) [DZUP]; (3 workers) [INPA]; same data, 17°44'30"S 51°37'13"W, 03.xi.2011, A2: mata seca (92 workers, 1 queen) [DZUP]; same data, 17°44'55"S 51°34'35"W, 10.xi.2011, A5: mata semidecidual (104 workers, 1 queen) [DZUP]; same data, 17°44'8"S 51°38'20"W, 06.xi.2011, A4: Mata de galeria (32 workers, 1 queen) [DZUP]. Faz. Sta Gertrudes, 17°50'07"S 51°43'04"W, 876m, 02.ii.2009, G.G. Santos col., Mini-Winkler (35 workers, 1 queen) [DZUP]; (5 workers) [INPA]. Faz. Sta. Lúcia, 17°50'15.7"S 51°39'23.9"W, 793m, 11.x.2008, G.G. Santos col., Mini-Winkler (110 workers) [DZUP]; (3 workers) [INPA]. Faz. Sertãozinho, 17°55'14"S 51°45'25"W, 843m, 18.ii.2009, G.G. Santos col., Mini-Winkler (118 workers, 2 queens) [DZUP]. Mta. Açude, 17°51'31"S 51°43'37"W, 21.xii.2005, G.G. Santos col., Mini-Winkler (287 workers, 62 queens) [DZUP]; (3 workers) [INPA]; (8 workers, 7 queens) [MZSP]; (2 queens) [NHMB]; same data, 16.xii.2005, Gustavo G. Paniago col. (1 worker) [DZUP]; same data, 12.xi.2005, G. Santos & G. Paniagua cols., pelo chão (1 queen) [DZUP]. Montividui, Faz. Veneza, 17°24'54.62"S 51°29'2.44"W, 960m, 07.iii.2009, G.G. Santos col., Mini-Winkler (30 workers, 2 queens) [DZUP]; (2 workers) [INPA]. Niquelândia, 14°01'S 48°18'W, 24.ix-6.x.1995, Silvestre, Dietz & Brandão cols., cerrado, peneira (3 workers) [MZSP]. Ouro Verde, Faz. Boa Vista, 16°17'54.5"S 49°12'42.6"W, 01-07.vii.2005, Silva R.R. & Feitosa R.M. cols., Winkler (8 workers) [MZSP]. Faz. São Cristovão, 18°5'32.87"S 52°2'23.85"W, 817m, 10.i.2009, G.G. Santos col., Mini-Winkler (128 workers, 5 queens) [DZUP]; (1 queen) [INPA]. **Maranhão:** Açailândia, Horto Fazenda Pompéia, 04°52'30"S 47°17'40"W, 13-22.ii.2006, Silva R.R & Feitosa R.M., Winkler (1 queen) [DZUP]; (1 workers, 1 queen) [MZSP]. **Mato Grosso:** Chapada dos Guimarães, Floresta Cachoeira, Pedra Furada, 18.ii.1985, Overal W.L. col., WLO850148, Berlese, pau podre (1 worker) [DZUP]; (1 worker) [MPEG]. Cuiabá, 15.ii.1976, R.I. Araujo col., col. Isoptera MZUSP n° 6539 (1 queen) [MZSP]. Utariiti, Rio Papagaio, 10.xi.1966, Lenko & Pereira, #4489 (3 workers) [MZSP]; same data, 26.x.1966, #4487 (18 workers) [MZSP]. **Mato Grosso do Sul:** Alcinópolis, P.N.M. Templo dos Pilares, Gruta da Lagoa, 18°08'56.7"S 53°40'43.5"W, 625m, 02-04.xi.2018, Silvestre R. et al. cols., Winkler (1 worker, 2 queens) [UFGD]. Antonio João, Faz. São Gabriel, Rio Dourados, 22.vii.2004, Silvestre R. col. (2 workers) [DZUP]; same data, i.2006 (1 worker) [DZUP]; same data, 22°06'36.4"S 55°35'31.6"W, vii.2006, Silvestre R. et al. cols., Winkler (1 worker) [DZUP]; (2 workers) [UFGD]. **Minas Gerais:** Ipaba, Faz. Macedônia, RPPN CENIBRA, xi.2005, Marques T. col., UFV LABECOL n°000158 (1 worker) [UFV]. Parque Estadual do Rio Doce, 19°47'49"S 42°34'38"W, 280m, 23-24.viii.2005, TEAM exped., Mini-Winkler, trilha da Garapa Torta, floresta atlântica estacional, semidecidual (1 worker) [DZUP]. **Pará:** Belém, Pirelli, 1964, R. Arlé (1 worker) [MPEG]; same data, 27.v.1974, D. Dias, #13461, c/ACM hystrix 5.74.6 (1 worker) [MZSP]. Benfica, 12-19.viii.1962, K. Lenko col., #4530 (2 workers) [MZSP]. Curionópolis, Projeto Antas do Norte, TL, 06°13'47.1"S 49°45'20.5"W, 5-7.viii.2017, M.G.T. Tavares col., Win-

kler, C2T1 (1 worker) [MPEG]; same data, Serra Leste, 05°57'17.8"S 49°37'00.4"W, 30.xi.2016, E.Z. Albuquerque & M.G.T. Monteiro cols., Winkler (2 workers) [DZUP]; (1 worker) [MPEG]. Itaituba, Mina do Palito, Área S3, 06°19'01.8"S 55°47'55.7"W, 21.i.2018, Silva R.R. & Prado L.P. cols., Winkler (2 workers) [MPEG]; same data, Copper Rios, 06°18'50.9"S 55°48'07.3"W, 30.i.2018, Winkler (1 worker) [MPEG]. Marituba, 1°22'S 48°20'W, 22.x.2004, Santos, J.R.M. col. (1 worker) [DZUP]. Parauapebas, Mina de Arenito, 0585852 9323986 UTM, 22m, 14-16.x.2017, E.Z. Albuquerque & M.G.T. Monteiro cols., Winkler (1 worker) [MPEG]; same data, A5, 0585343 9327185 UTM, 04.iv.2018, solo (2 workers) [MPEG]; same data, tronco (1 worker) [DZUP]. S. Norte, Carajas, vii-viii.1985, Brandão & Benson col., Berlese, UNICAMP, Ecol. Campo I, M3 Mata trilha, dia (3 workers) [MZSP]. Serra Norte Serraria, 31.i.1985, Berlese (5 workers) [MPEG]; same data, Est. Manganês, 21.x.1984 (4 workers) [DZUP]; (3 workers) [MPEG]. **Paraíba:** Mamanguape, Rebio Guaribas II, 6°43'55.09"S 35°10'29.46"W, 03.vii.2015, B. Lunar col., Winkler (2 workers) [DZUP]. **Paraná:** Foz do Iguaçú, Parque Nacional do Iguaçú, 25°37'40"S 54°27'46"W, 221m, 07-13.xi.2015, Silvestre R., Trad B.M., Lopez V.M. cols., Winkler (5 workers, 3 queens) [UFGD]; (2 workers) [DZUP]. Iguaçu, iv.1965, F. Plaumann col., #4493 (7 workers, 1 queen) [MZSP]. Palotina, Parque Estadual São Camilo, 24°19.19.276"S 53°55.247'W, 23.ix.2015, Busanello D. & Caron E. cols. (10 workers) [DZUP]. Rondon, iv.1965, F. Plaumann col., #4767 (11 workers, 1 queen) [MZSP]; same data, 24°38'B 54°07'L (1 worker) [MZSP]. Tuneiras do Oeste, Reserva Biologica das Perobas, 23°50'9.78"S 52°45'17.28"W, 18.ix.2015, Busanello D. & Caron E. cols. (1 worker) [DZUP]; same data, 23°50'S 52°45'W, 540m, E. Caron col., Winkler (22 workers, 1 queen) [DZUP]. **Santa Catarina:** Painel, Base Avançada do IBAMA, 18.v.2013, Feitosa R.M. col., solo (3 workers) [DZUP]. **São Paulo:** Matão, Faz. Cambuhy, 21°37'35.5"S 48°33'24.8"W, 29-31.x.2017, Prado L.P., Adams R., Almeida R.P.S. & Silva J.A. cols., #LPP_303, busca ativa, mata da Virginia (3 workers) [MPEG]; same data, Mata do S. Joãozinho, 12.iv.2014, M.A. Ulyssea & L.P. Prado cols. (3 workers) [DZUP]; same data, Mata da Virginia, 21°36'59"S 48°31'32.3"W, 11.iv.2014, M.A. Ulyssea & L.P. Prado cols., Winkler (10 workers) [MZSP]; same data, 12.iv.2014 (4 workers) [MZSP]; same data, 17-22.iv.2015 (11 workers) [MZSP]; same data, 30.iii-03.iv.2016 (18 workers) [MZSP]. Teodoro Sampaio, P.E. Morro do Diabo, 22°33.8'50"S 52°18'03.8"W, 396m, vii.2005, Silvestre R. col. (1 worker) [UFGD]. **Sergipe:** Areia Branca, E.E. da Serra de Itabaiana, 10°45'54"S 37°19'57.4"W, 19-25.v.2003, Silva R.R., Dietz B.H. & Ferreira L.S. cols., Winkler (1 queen) [MZSP]. Nossa Senhora das Dores, 10°27.5'S 37°07.6"W, 01.ix.2014, Almeida col., RPS área MBV (1 worker) [DZUP]; same data, área APP (4 workers) [DZUP]. Sta. L. do Itanhy, Crasto, 28.xi.1993, J. Jardim col., #4694F (3 workers) [DZUP]; same data, 11°22'39.3"S 37°25'07.4"W, 29.vii-03.viii.2001, Silva R.R. & Brandão C.R.F. cols., Winkler (84 workers) [MZSP]. **Tocantins:** Aguiarnópolis, 06°36'49.4"S 47°28'53.2"W, 14-19.i.2005, Silva R.R. & Silvestre R. cols. (1 worker) [MZSP]. Araguacema, 08°59'20"S 49°40'41"W, 16-30.xi.2005, Silva R.R. & Feitosa R.M. cols., Winkler (9 workers, 2 queens) [MZSP]; same data, 09°01'11"S 49°42'09"W (3 workers) [DZUP]. Araguaína, UFT, EMVE, mata de galeria, 01.iv.2016, V.E. Sandoval & S. Dantas cols., pitfall (1 worker, 1 queen) [MPEG]. Babaçulândia, 07°02'19.0"S 47°52'03.4"W, 14-19.i.2005, Silva R.R. & Silvestre R. cols., Winkler (1 worker) [MZSP]. Novo Jardim, 11°50'26.9"S 46°41'11.7"W, 09.x.2004, Silva R.R. & Dietz B.H. cols., Winkler (3 workers, 1 queen) [MZSP]. Palmeiras do Tocantins, 06°40'12.1"S 47°31'48.6"W, 01-09.vi.2005, Silva R.R. & Feitosa R.M. cols., Winkler (29 workers, 1 queen) [MZSP]. Paranã, Serra da Contenda, 13°21'27.5"S 47°40'W, 15.x.2004, Silva R.R & Dietz B.H., Winkler, Mata Ciliar (2 workers) [MZSP]; (2 workers) [DZUP]. **COLOMBIA:** **Cauca:** Vda. Rosal, Piamonte, 19.ix.2017, Winkler (2 workers) [DZUP]. **Meta:** Cubarral, Vereda Aguas Claras, 3°47'56.1"N 73°53'48.1"W, 698m, 20-22.ii.2016, N. Ladino & C. Yara cols., Winkler, lluvias bajas, fragmento de bosque en área periurbana (12 workers) [DZUP]; (2 workers) [NHMB]. Villavicencio, C.I. Corpoica, 4°4'24.0"N 73°28'21.6"W, 340m, 19-21.xi.2015, N. Ladino & C. Yara cols., Winkler, bosque (2 workers) [DZUP]. **Vaupés:** Mitú, bosque intervenido, 2km, 08.viii.2019 (2 workers) [DZUP]; same data, Meneses leg., Winkler (1 worker) [DZUP]. **COSTA RICA:** Ararat, 10.06528 -83.54861, 400m, 10-11.viii.2002, Roisin & Vauthier cols., Winkler (5 workers) [CEPEC]. **Cartago:** CATIE, nr. Turrialba, 9.9 -83.65, 550m, 13.v.1987, J. Longino col., JTL1644-s, Winkler, wet forest, ex. sifted leaf litter, CASENT0249588 (1 queen) [JTLC]. 4km E. Turrialba 9°54'N 83°39'W, 550m, 13.v.1987, J. Longino col., ex. sifted leaf litter, wet forest, LACM ENT 142630 (1 worker, 1 queen) [JTLC]. **Heredia:** Est. Biol. La Selva, 10°26'N 84°01'W, 50-150m, 01.vi.1993, InBio-OET, parcelas sucesionales, B/01/099, INBIOCRI001276880 (1 queen) [DZUP]; same data, INBIOCRI001276877 (1 worker) [JTLC]; same data, 2-12.viii.2004, Ant Course 2004 cols., (3 workers) [MZSP]; same data, 10.4333 -84.01667, 100m, 14.x.2014, Berlese, ALASB/10/091, rainforest, CASENT0007009 (1 worker) [CASC]; same data, 10.41667 -84.06667, 50m, 04.viii.2004, R.A. Johnson col., RAJ3461, ex. rotten log, CASENT0052775 (2 workers) [CASC]; same data, tropi-

cal rainforest, CASENT0107555 (3 workers) [CASC]. **Limón:** Res. Biol. Hitoy-Cerere, 9.65727 -83.02598 ±25m, 530m, 11.vi.2015, ADMAC, #Wm-E-02-1-03, ex. sifted leaf litter, tropical rainforest, CASENT0632086 (1 worker) [JTLCL]. **ECUADOR: Napo:** Jatun Sacha, 7km ESE Pto Misahualli, -1.0667 -77.6167, 400m, 05.viii.1991, P.S. Ward col., PSW11364-1, sifted litter (leaf mold, rotten wood), CASENT0260461 (3 workers) [PSWC]. **GUYANA:** Calm Water Creek along Essequibo River, near Bartica, 6.46767 -58.61933, 24.ix.2002, J.S. LaPolla col., JSL020925-01-LS01, litter sample, USNMENT00441927 (1 worker) [USNM]. **Kartabo:** B.G., vii-viii.1920, W.M. Wheeler col. (3 workers) [MZSP]. **HONDURAS: Gracias a Dios:** Las Marias, 15.72235 -84.88480±20m, 620m, 10.vi.2010, LLAMA, #Wm-C-07-I-07, CASENT0612386 (1 queen) [JTLCL]. **NICARAGUA: Boaco:** 24km ENE Boaco, 12.58180 -85.46661, 680m, 17.iv.2011, J. Longino, JTL7321-s, ex. sifted leaf litter, 2°forest; Bold DNA voucher, CASENT0624993 (1 worker) [JTLCL]. **Chontales:** 2.5km NE Santo Domingo, 12.27641 -85.06350 ±100m, 730m, 21.iv.2011, J. Longino col., #JTL7365-s, ex. sifted leaf litter, wet forest, CASENT0613735 (1 worker) [DZUP]. **Matagalpa:** RN Cerro Musún, 12.96078 -85.23306 ±10m, 750m, 01.v.2011, LLAMA, #Wm-D-01-1-06, ex. sifted leaf litter, tropical wet forest, CASENT0623928 (1 worker) [DZUP]. **PANAMA:** 18.iii.1968, Lindsay *et al.* cols., on orchids, CASENT0246699 (1 worker) [USNM]. Cerro Azul, 9.24533 -79.40209 ±20m, 840m, 24.i.2015, J. Longino col., #9160, montane wet forest, in tree fern base, CASENT0632957 (1 worker) [JTLCL]. **Darién:** Reserva Chucantí, 8.78803 -78.45035 ±50m, 720m, 20.i.2015, J. Longino col., #9071-s, ex. sifted leaf litter, moist forest, CASENT0633572 (1 queen) [JTLCL]; CASENT0633602 (1 queen) [JTLCL]. **PARAGUAY: Amambay:** Capitan Bado, -23.266666 -55.533333, 550m, 24.x.1979, J-L. Perret col., ANTC4709, CASENT0102502 (3 workers) [MHNG]. **Canindeyú:** 24°03'S 55°34'W, 30.iii.1996, A. Wild col. (3 workers) [IMLA]. Reserva Natural del Bosque Mbaracayú, Jejuimí, -24.1 -55.533333, 24.vii.1996, A.L. Wild col., AW0234, humid sub-tropical inundated low forest, CASENT0173505 (3 workers) [ALWC]. **PERU: Cusco:** Est. Biol. Villa Carmen, -12.902437° -71.407672° ±300m, 590m, 05-15.viii.2013, Ant Course 2013 cols., bamboo forest, secondary vegetation (3 workers) [DZUP]; same data, 9km NE Cusco, -12.8940° -71.40385°, 525m, J. Lattke col., #3382 (2 workers) [DZUP]. **Junín:** San Ramón de Pangoa, 40km SE Satipo, -11.42863 -74.4884, 750m, 23.iii.1972, R.T. & J.C. Schuh cols., ANTC30081, high secondary forest, soil-litter layer, ANTWEB1008581 (1 worker) [AMNH]. **Madre de Dios:** Est. Biol. Villa Carmen, -12.869043°S 71.407111° 800m, 5-15.viii.2013, Ant Course 2013 cols. (1 worker) [DZUP]; same data, -12.875296° -71.410954°±300m, 650m, rainforest (1 worker) [DZUP]; same data, -12.888005° -71.401526°±300m, 525m, Feitosa R.M. col., riparian successional vegetation (2 workers) [DZUP]. Puerto Maldonado, Sachavacayoc Centre, 12°51'15.4"S 69°22'15.9"W, 209m, 19-31.vii.2012, R. Feitosa col., Ant Course (2 workers) [DZUP]. **San Martín:** Davidcillo, 20km NNE Tarapoto, 6°15'S 76°15'W, 220m 21.viii.1986, P.S. Ward col., #8684-28, sifted litter (leaf mold, rotten wood), rainforest, PSW10127-2, CASENT0863189 (1 worker) [PSWC]. **SURINAME: Sipaliwini:** Lely Mountains, 4.25295 -54.7561, 619m, 03.xi.2005, Sosa-Calvo J. & Badal R. cols., JSC051103-01-LS15, litter sample, tall forest, high leaf litter decomposition, USNMENT00446073 (1 worker) [USNM]. **VENEZUELA: Territorio Federal Amazonas:** Alto Rio Siapa, 01°42'50"N 64°33'40"W, 495m, 04.ii.1989, J. Lattke col., CASENT0810413 (1 worker) [MIZA].

Prionopelta antillana Forel, 1909

Figures 14–17, 35B

Prionopelta punctulata subsp. *antillana* Forel, 1909: 239. Lectotype worker (here designated): ST. VINCENT AND THE GRENADINES, St. Vincent Island, Forel, CASENT0102529 (the top individual of a pin with 2 workers) [ZMUC] (examined by images). Paralectotype worker: same data as lectotype, Cotype MCZ20385 (examined by images) [MCZ].

Raised to species: Brown, 1960: 177.

Prionopelta marthae Forel, 1909: 240. Syntype workers: VENEZUELA: Zig Zag, Forel, CASENT0102526 [MHNG] (the top specimen of a pin with 3 workers); same data (1 worker examined) (1 bottom worker misidentified) [NHMB]; CASENT0902630 (1 worker examined by images) [BMNH]. Combination in *Typhlomyrmex*: Brown, 1953: 104; in *Prionopelta*: Brown, 1965: 77. **New synonym.**

Diagnosis. Median tooth of mandible shorter than basal tooth; anterior clypeal margin slightly projecting medially; lateral portion of frons with sparse or dense punctate sculpturing, with interspaces flat and shiny, corresponding to one or almost two puncture diameters; head with sparse pubescence in dorsal-oblique view. Twelve antennomeres. Subpetiolar process usually with margins apically convergent.

Worker measurements (n=41). HL 0.45–0.54; HW 0.37–0.45; SL 0.18–0.30; WL 0.48–0.67; PrL 0.19–0.30;

PrW 0.23–0.34; PetNL 0.12–0.17; PetW 0.20–0.28; PetH 0.14–0.22; PetL 0.12–0.20; T1L 0.18–0.28; T1W 0.27–0.43; TL 1.23–1.67; CI 80–95; SI 45–75; PetI 125–185; PetHI 80–128; PetWI 110–171.

Queen measurements (n=3). HL 0.52–0.53; HW 0.46–0.47; SL 0.26–0.30; WL 0.76–0.78; PrL 0.14–0.18; PrW 0.30–0.40; PetNL 0.15–0.20; PetW 0.20–0.30; PetH 0.18–0.21; PetL 0.18–0.20; T1L 0.28–0.30; T1W 0.41–0.46; TL 1.77–1.80; CI 88–89; SI 55–65; PetI 125–150; PetHI 94–116; PetWI 105–150.

Worker description. Body light yellow to light brown. Integument covered mainly by dense or sparse punctate sculpturing; space between the punctures of lateral portion of frons corresponding to one or almost two puncture diameters in full-face view.

Head longer than broad; length of median tooth of mandible shorter than basal tooth; basal margins of mandibles convex. Clypeus slightly projected medially. Twelve antennomeres; antennomeres 1–4 separated by deep constrictions. Eye placed at the midlength of the head.

Pronotum broader than long. Distance between propodeal spiracle and the bulla of the metapleural gland corresponding to one spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to two or three spiracular diameters.

Petiolar node as long as high. Subpetiolar process subtriangular or falciform, with its anterior and posterior margins converging apically; posterior margin concave; posteroventral angle obtuse or acute.

Queen. Similar to workers, with the expected morphology of *Prionopelta* queens.

Male. Our translation of the description provided by Forel (1893) is: “L. 2.5 mm. Very similar to *Amblyopone* males, particularly to *A. gheorghieffi* Forel; but the wings have only one cubital cell and the transverse vein has an ulnar ramification. Hypopygium ends in an elongated medial tip, hairy and obtuse at its apex. External genital valves are very obtuse. The pygidium is rounded. Petiole is rounded, with a slight posterior slope, with a small, barely visible tubercle underneath. Head large, rounded; eyes very far forward; small ocelli. Shiny, finely reticulate. Pilosity erect, yellowish, very fine, short, oblique on tibiae and elsewhere (turning to pubescence), quite abundant. Pale yellowish-brown [...].”

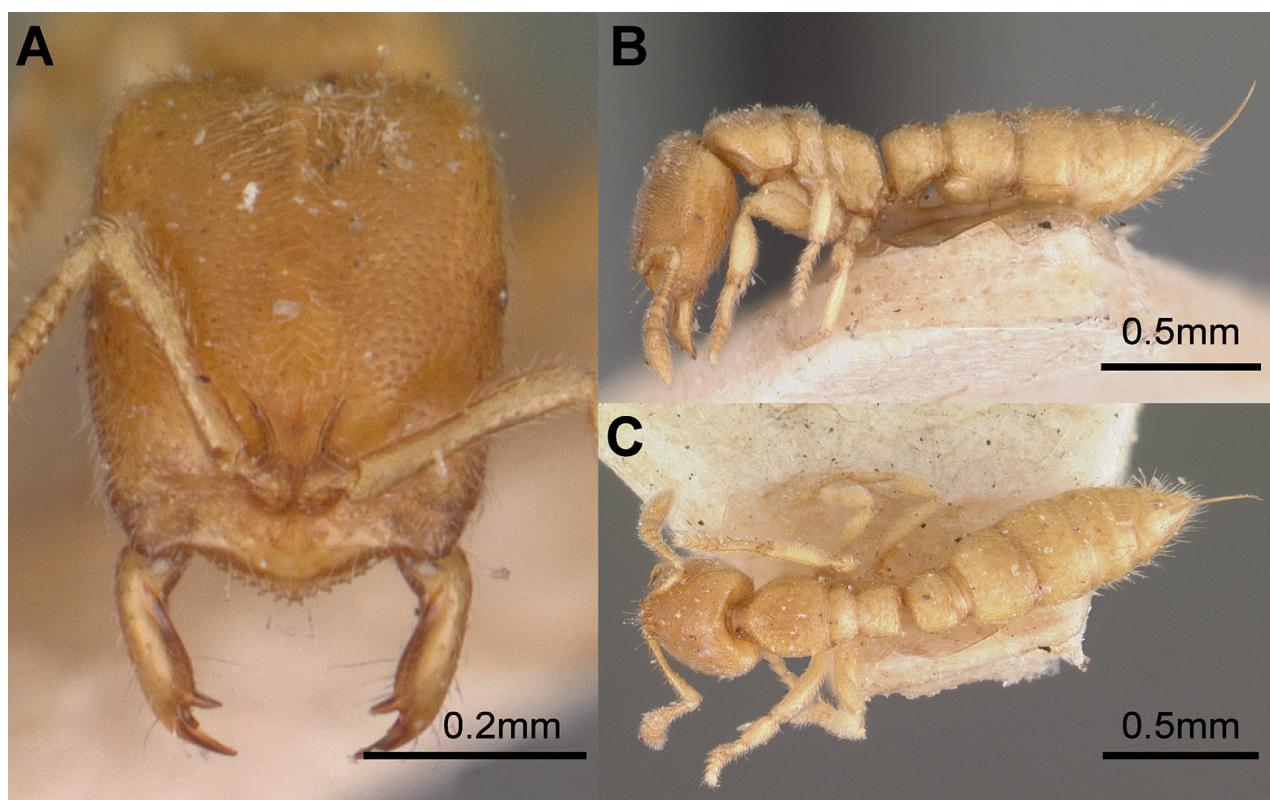


FIGURE 14. Lectotype worker of *Prionopelta antillana* (Saint Vincent and the Grenadines). A. Full-face view; B. Lateral view; C. Dorsal view. Modified from AntWeb.org images by April Nobile, specimen: CASENT0102529.

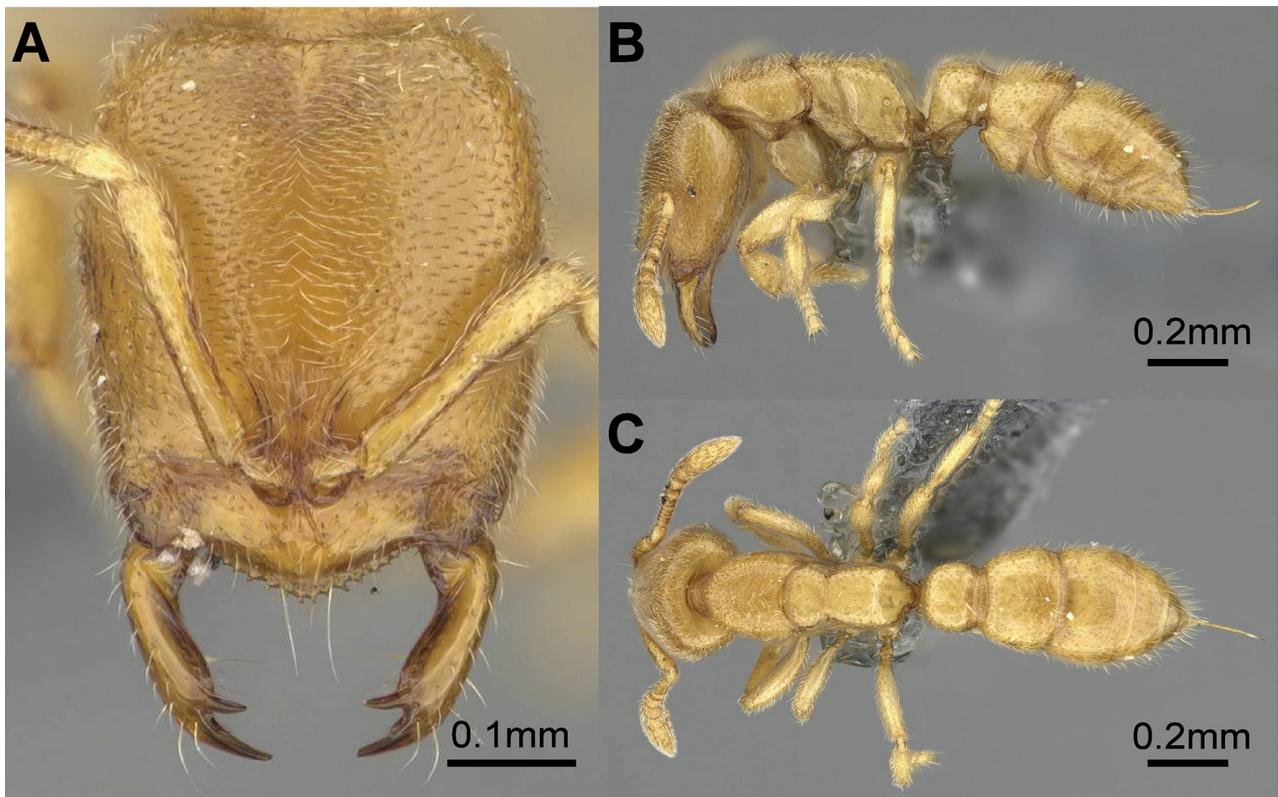


FIGURE 15. Worker of *Prionopelta antillana* (Saint Vincent and the Grenadines). A. Full-face view; B. Lateral view; C. Dorsal view. Modified from AntWeb.org images by Michele Esposito, specimen: CASENT0767588.

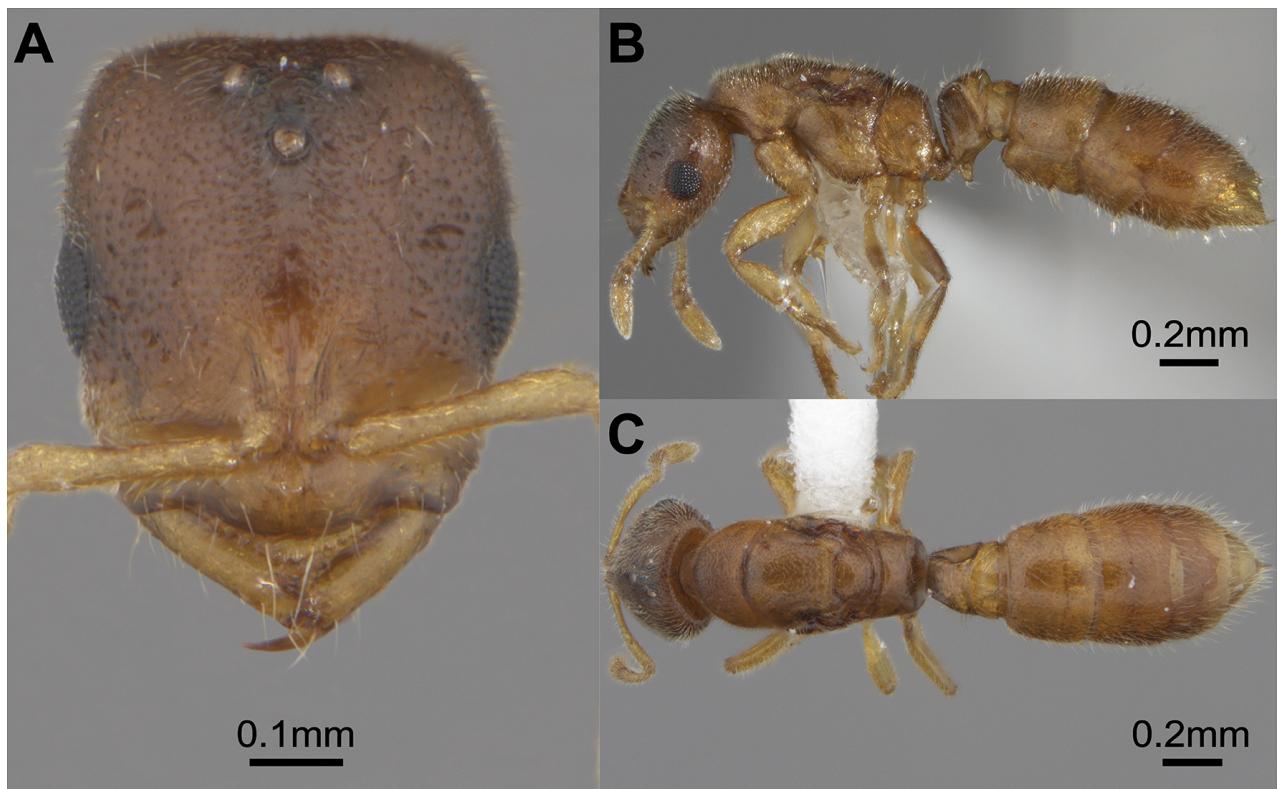


FIGURE 16. Queen of *Prionopelta antillana* (Brazil, Goiás). A. Full-face view; B. Lateral view; C. Dorsal view.

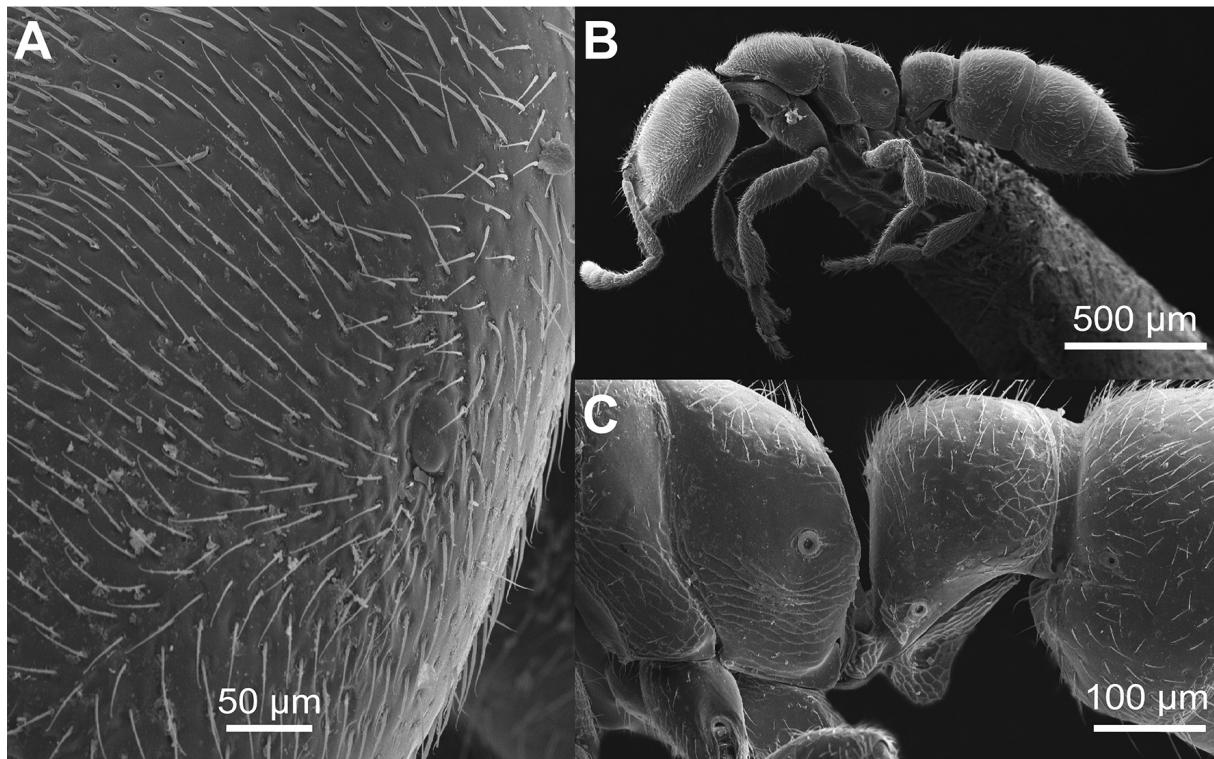


FIGURE 17. Worker of *Prionopelta antillana* (Ecuador, Zamora-Chinchipe). A. Head dorsum, note the sculpturing and pilosity; B. Habitus; C. Detail of subpetiolar process.

Etymology. Although not explicit in the original description, the name certainly refers to the type locality, “Antille St. Vincent”.

Distribution (Fig. 35B). *Prionopelta antillana* is known from Marion County and Sumter County in Florida, and the Caribbean Islands to south Brazil.

Comments. Forel (1909) presented the first key for the identification of the Neotropical species of *Prionopelta*. In this key, *P. marthae* and *P. punctulata* subsp. *antillana* appear in the same couplet, with some ambiguous characteristics separating both species.

Almost 50 years after its description, *P. marthae* was considered a junior synonym of *Typhlomyrmex rogenhoferi* Mayr, 1862 (Brown 1953), based on a *Typhlomyrmex* specimen mislabeled as syntype of *P. marthae* located in the collection of William M. Wheeler (MCZ). In consequence, the species was excluded from the key provided by Brown (1960). Later, the species was recognized as a member of *Prionopelta*, close related to *P. antillana*, and was transferred to this genus by Brown (1965).

The examination of type specimens revealed that the bottom specimen mounted on the pin that holds syntypes of *P. marthae* deposited at NHMB belongs to the myrmicine genus *Solenopsis*. Also, the “cotype” specimen deposited in MCZ under the code MCZ-ENT00020384 belongs to the ectatommine genus *Typhlomyrmex*.

Initially, subtle differences seemed to separate *P. antillana* and *P. marthae*, according to the original descriptions and among specimens accumulated in scientific collections, specifically regarding the head dorsum sculpturing, the shape of the subpetiolar process and the width of the first gastral segment. In fact, type specimens of *P. marthae* and *P. antillana* show morphological differences (CASENT0102526, CASENT0902630, CASENT0102529 and MCZ-ENT20385). However, both forms are highly overlapped in their wide distribution, and the morphology follows a continuous variation that blurs the limits between the species. This was supported by the analysis of the measurements that showed a very close relationship between the individuals, in terms of variation and discrimination of groups (Fig. 36A, B). Still, we saw that some specimens of São Paulo, Paraná and Santa Catarina, Brazil, show a denser sculpturing on the head dorsum and different degrees of convergence between the margins of the subpetiolar process, features not considered in the statistical analysis. Considering the statements above, we synonymized *P. marthae* with *P. antillana*. Also, we believe that *P. antillana* still may harbor a complex of cryptic species difficult to resolve with morphology alone.

Dr. James Wetterer (*pers. comm.*) made a great effort to illuminate the geographic spread of *P. antillana*. The following account is based on Dr. Wetterer's notes on published and unpublished records of the species: “*P. antillana* is a tiny ant with records from the West Indies, South America, Central America and subtropical central Florida [...] I have collected the species at 48 sites on the West Indian Islands of Grenada (2), Guadeloupe (2), Martinique (5), Montserrat (4), Nevis (8), St. Kitts (8), St. Lucia (3), St. Vincent (8), and Trinidad (8). The islands of Grenada, Montserrat, Nevis, St. Kitts and St. Lucia have not reported the presence of the species so far [...]. There is a difficulty in the distinction of *P. antillana* and *P. amabilis*, and then a probability of misidentification between both species in the records [...]. Although Brown (1960) considered that the species was introduced to the Lesser Antilles, recent collecting have much filled the distributional gap. The current distribution of *P. antillana* is now understood considering the natural spread through short-distance island-hopping.”

Part of the specimen records cited by Dr. Wetterer were confirmed in our work, and some of the unconfirmed ones follow the distribution of the species presented here (Fig. 35B). Nevertheless, our work only considers material examined directly by us or through high resolution images.

Forel (1893) provided the description of a male specimen said to be *P. punctulata* collected at St. Vincent by Mons. H.H. Smith, as well as field annotations from the latter author. As insightfully noted by Dr. Flavia Esteves (*pers. comm.*) and in line with the distributions recognized here for *P. punctulata* and *P. antillana*, the male described by Forel actually belongs to *P. antillana*.

Natural history. The species is mainly known from pitfall traps and leaf litter samples collected in tropical forests. It is reported at elevations of 200-1010m.

Field annotations provided by Mons. H.H. Smith of specimens from St. Vincent under the name of *P. punctulata* are presented in Forel (1893). We summarize this information as follows: somewhat common and sluggish ants, generally found in shady and damp places, sharing the substrate with other ants. Differences between workers and queens do not seem to be very obvious.

Deyrup *et al.* (2000) reported that the species may be introduced from the Lesser Antilles or Central America to the state of Florida, USA, where it is “common in rotten wood in parts of Marion and Sumter County”.

The following account is based on the detailed observations of Deyrup *et al.* (2016) about the presence of *P. antillana* in Florida: the worker caste of the species is small and cryptic, collected in soil, under low evergreen scrub oaks, in mesic hammocks, sand pine scrub and leaf litter samples; known from a 2004 expedition near the Big Scrub Campground in Ocala National Forest and during the Florida ant survey. This species is the unique record of the genus in the United States, probably imported to Marion County from West Indies, it spread slowly ever since, and eventually should occupy southern Florida. The city of Silver Spring and a botanical garden located there might be the entering site for the introduction of the species, since famous films supposedly set in the tropics were filmed there, like 1930s Tarzan movies with Johnny Wissmuller, in which aquatic adventures in Silver Springs are jarringly intermixed with odd footage from Africa and elsewhere. Perhaps tropical plants were brought for some scenes. These last statements about the origin of the species introduction in Florida were also noticed by Dr. Andrea Lucky (*pers. comm.*) and discussed.

Additional material examined (259 specimens). **BOLIVIA:** Santa Cruz: Buena Vista, -17.45° -63.66667°, 350m, 18.xii.1993, P.S. Ward col., PSW12438, second-growth rainforest, sifted litter, CASENT0006076 (1 worker) [UCDC]. **BRAZIL: Distrito Federal:** Brasilia, Tabatinga, F.Z. Cooperbrás, 2003-2004, Schmidt F.G.V. col., pitfall (1 worker) [CEPEC]. **Espirito Santo:** Sta. Teresa, 25.i.1994, I.C. Nascimento col., #4782 (7 workers) [DZUP]. **Goiás:** Jataí, Faz. Primavera, 17°51'54"S 51°39'56"W, 817m, 09.xi.2008, G.G. Santos col., Mini-Winkler (17 workers, 1 queen) [DZUP]. Faz. Santa Lúcia 17°50'15.7"S 52°2'23.9"W, 793m, 11.x.2008, G.G. Santos col., Mini-Winkler (1 worker) [DZUP]. Mta. Açu de, 17°51'31"S 51°43'37"W, 21.xii.2005, G.G. Santos col., Mini-Winkler (1 worker, 1 queen) [DZUP]. **Maranhão:** Açailândia, Horto Fazenda Pompéia, 04°52'30"S 47°17'40"W, 13-22.ii.2006, Silva R.R. & Feitosa R.M. cols., Winkler (4 workers) [MZSP]. Balsas, Mata do Capão do Catulé, 09°22'53.8"S 46°44'59.3"W, 22.ix-05.x.2006, Silva R.R. & Feitosa R.M. cols. (1 worker) [MZSP]. **Minas Gerais:** Parna do Cipó, Cachoeira da Farofa, -19.379412 -43.575782, 877m, 11.v.2016, J. Chaúl col., #014, Winkler, epigaeic, ANTWEB1032567 (1 queen) [UFV]. **Paraná:** Morretes, Parque Estadual do Pau-Ôco, 25°34'33.5"S 48°53'19.5"W, 6-11.v.2002, Silva R.R. & Dietz B.H. cols., Winkler (9 workers) [MZSP]; (2 workers) [DZUP]. **Rondônia:** Porto Velho, Área Abunã, A11P1, 09°38'36"S 65°26'54"W, 02-16.x.2013, Mazão G.R. & Mendoça R.T.T. cols. (1 worker) [DZUP]. **Santa Catarina:** Blumenau, 27°06'15"S 49°09'14"W, 20-27.x.2000, Silva R.R. col., Winkler, solo (5 workers) [MZSP]; same data, P.E. Nascentes, 27°01-06"S 49°01-10"W, 10.ii.2001, Eb-

erhardt col., Winkler (1 worker) [MZSP]. Morro da Serra, xii.1958, F. Plaumann col. (1 worker) [MZSP]. Palhoça, PE Serra do Tabuleiro, 27°44'28"S 48°41'50"W, 02-10.vi.2003, Silva R.R., Dietz B.H. & Tavares A. cols., Winkler (25 workers, 3 queens) [MZSP]; same data (2 workers) [DZUP]. São Bento do Sul, APA Rio Vermelho, 26°21'51"S 49°16'16"W, 30.iii-04.iv.2001, Silva R.R. & Eberhardt F. cols., Winkler (19 workers) [MZSP]; (4 workers) [DZUP]. **São Paulo:** Faz. Intermontes, iv.2009 (1 worker) [MZSP]. M. Cruzes, R. Itatinga, 23°45'02"S 46°07'63"W, 720m, 12.vii.2000, M.S.C. Morini col., Winkler, área de mata (1 worker) [CEPEC]. Tapiraí, 24°01'55"S 47°27'56"W, 08-14.i.2001, Silva & Eberhardt cols., Winkler (2 workers) [MZSP]. Ubatuba, P.E.S.M. N. Picinguaba, 23°17'54.4"S 44°47'49.2"W, 600m, 23.i.2006, Scott-Santos C.P. & Santos E.F. cols., Winkler (3 workers) [MZSP]; same data, 23°18'21.6"S 44°48'25.2"W, 400m, 05.i.2006 (5 workers) [MZSP]; same data, 19.iii.2006 (2 workers) [MZSP]; same data, 23°19'08.4"S 44°49'4.8"W, 200m, 18.iii.2006 (3 workers) [MZSP]. **Tocantins:** Recursolândia, Mata Ciliar Rio Mateiros, 08°45'28.6"S 47°02'20.7"W, 09-12.v.2005, Silva R.R. & Dietz B.H. cols., Winkler (15 workers) [MZSP]. **COLOMBIA: Antioquia:** La Calandria, 06°46'31"N 75°05'53"W, 1010m, 08.v.1998, F. Serna col. (2 workers) [DZUP]. **Magdalena:** 4km N. San Pedro 10°57'N 74°03'W, 550m, 14.viii.1985, J. Longino col., #763-S, wet forest, litter sample, LACM ENT 142650 (2 workers) [JTLC]; same data, 10.95 -74.05, P.S. Ward col., PSW07912-2, rainforest, sifted litter (leaf mold, rotten wood), CASENT0260463 (2 workers) [PSWC]. **ECUADOR: Zamora-Chinchipe:** ENE Yantzaza, Estación El Padmi, 18.7 Universidad Nacional de Loja, 3°44'44.59"S 78°36'51.70"W, 835m, 14.vi.2014, C. Gómez, M. Tuza, G. Piedra, M. Vélez & J. Lattke col. (2 workers) [MZSP]; (21 workers) [DZUP]. **FRENCH GUIANA: Saül:** Mont Chauve, 250m, 24.iv.1997, R. Garrouste col., (6 workers) [CEPEC]; (1 worker) [DZUP]. **GUADELOUPE: Basse Terre:** Piton de Ste. Rose, 16.33166 -61.76206±50m, 320m, 26.v.2012, R.S. Anderson col., #RSA2012-148, ex. sifted leaf litter, deciduous forest, CASENT0630440 (1 worker) [JTLC]. **PERU: Cusco:** Est. Biol. Villa Carmen, -12.902437° -71.407672° ±300m, 590m, 05-15.viii.2013, Ant Course 2013 cols., bamboo forest, secondary vegetation (1 worker) [DZUP]. **Madre de Dios:** Est. Biol. Villa Carmen, -12.875296° -71.410954°±300m, 650m, 05-15.viii.2013, Ant Course 2013 cols., rainforest, (2 workers) [DZUP]; same data, -12.902437° -71.407672° ±300m, 590m, bamboo forest, secondary vegetation (1 worker) [DZUP]. Tambopata Research Center, -13.14535 -69.61483 ±100m, 276m, 01.vii.2000, D. Feener col., TRC-S14-007-R1C10, ex. sifted leaf litter, bamboo forest, CASENT0635236 (1 worker) [JTLC]. **SAINT VINCENT AND THE GRENADINES:** St. Vincent, Vermont Nature trail, 13.21632 -61.21416 ±25m, 365m, 05.v.2015, B.L. Fisher col., BLF#37240, rainforest, ANTWEB, CASENT0767588 (1 worker) [CASC]; BLF#37241, CASENT0768612 (1 worker) [CASC]; CASENT0768611 (1 worker) [CASC]; BLF#37243, CASENT0767564 (1 worker) [CASC]; CASENT0767562 (1 worker) [CASC]; BLF#37248, CASENT0767570 (1 worker) [CASC]; BLF#37248, CASENT0767569 (1 worker) [CASC]; BLF#37233, CASENT0767621 (1 worker) [CASC]; same data, 18.v.2015, B.L. Fisher col., BLF#37246, hand collection, sifted litter, miscellaneous collection, not a nest series, CASENT0767612 (1 worker) [CASC]; same data, 12.v.2015, BLF#37240, CASENT0767588 (1 worker) [CASC]. **SURINAME: Poeroe mankemisa:** ix.1959, I.v.d. Drift col., 2-xxla-5 (1 worker) [MZSP]. **Tambah-redjo:** vi.1959, I.V.D. Drift col., 42-viiicd-2 (9 workers) [MZSP]; (3 workers) [DZUP]; same data, 45-DVla-7 (3 workers) [DZUP]; same data, 1-viib-6 (2 workers) [MZSP]; same data, 38.VLcd-12 (3 workers) [MZSP]. **UNITED STATES: Florida:** Marion, Ocala Nat. Forest, Big scrub camp area, 29.08017 -82.25817, 28.viii.2004, Deyrup M. col., ANTC5127, *Quercus geminata* thicket, introduced, CASENT0103911 (5 workers) [ABS]. **VENEZUELA: Apure:** Caño Maporal ca. Est. Unellez, 21.viii.1983, J. Lattke col., #455, CASENT0810393 (3 workers) [MIZA]. **Aragua:** Henri Pittier National park, 10.36667 -67.82667, 860m, 03.ix.2003, E. Rodríguez, A. Grotto & J. Lattke cols., JEL2842, La Esperanza, Bosque Semi decíduo, ex. hojarasca, CASENT0178694 (1 worker) [MIZA]. Parque Nacional Henri Pittier, 10°22'8"N 67°49'29"W, 870m, 03.iii.2003, E. Rodríguez, R. Luján & J. Lattke cols., Winkler, La Esperanza (nome de um setor na montanha), floresta semi-decídua (21 workers) [DZUP]; (1 worker) [MZSP]; (2 workers) [NHMB]; same data, Finca Sta Maria, 10.3602° -67.8219°, 650m, 15.viii.2003, J. Lattke col., #2669, soil sample (1 worker, 1 queen) [DZUP]. **Portuguesa:** Qda. La Guata, 12km de Biscucuy, 600m, 21.v.1983, #464, CASENT0810394 (3 workers) [MIZA]. **Táchira:** Vía Sta. Ana, Río Frío, 1000m, 14.viii.1983, J. Lattke & G. Borges col., CASENT0810424 (4 workers) [MIZA].

Prionopelta dubia sp. n.

Figures 18–21, 35A

Holotype worker: BOLIVIA: Beni: Est. Biol. Beni, 42km, E. San Borja, 210m, 14°48'S 66°23'W, 5.ix.1987, P.S.

Ward col., #9085-20, sifted litter (leaf mold, rotten wood, trop. moist forest), #9085-1, DZUP549772 (1 specimen) [DZUP].

Paratype workers. same data as holotype, DZUP549773 (1 specimen) [DZUP]; DZUP549774 (1 specimen) [DZUP]; DZUP759775 (1 specimen) [DZUP]; same data, CASENT0863190 (1 specimen) [CASC]; DZUP549776 (1 specimen) [UCDC]; DZUP549777 (1 specimen) [USNM].

Diagnosis. Basal and median tooth of mandible mainly subequal in length; clypeus evenly rounded; lateral portion of frons with shallow and dense sculpturing; head with dense pubescence in dorsal-oblique view. Twelve antennomeres.

Holotype measurements. HL 0.53; HW 0.44; SL 0.24; WL 0.63; PrL 0.23; PrW 0.29; PetNL 0.13; PetW 0.23; PetH 0.17; PetL 0.16; T1L 0.24; T1W 0.35; TL 1.56; CI 83; SI 54; PetI 176; PetHI 106; PetWI 143.

Worker measurements (n=13). HL 0.46–0.58; HW 0.41–0.50; SL 0.24–0.28; WL 0.56–0.70; PrL 0.22–0.27; PrW 0.26–0.34; PetNL 0.13–0.18; PetW 0.20–0.26; PetH 0.16–0.20; PetL 0.15–0.18; T1L 0.19–0.25; T1W 0.30–0.40; TL 1.38–1.70; CI 81–91; SI 50–63; PetI 142–185; PetHI 88–120; PetWI 122–160.

Queen measurements (n=9). HL 0.64–0.65; HW 0.54–0.55; SL 0.31–0.35; WL 0.90–0.92; PrL 0.18–0.20; PrW 0.31–0.47; PetNL 0.17–0.19; PetW 0.30–0.35; PetH 0.21–0.22; PetL 0.21–0.22; T1L 0.25–0.27; T1W 0.44–0.47; TL 1.79–2.00; CI 83–85; SI 56–64; PetI 157–205; PetHI 95–104; PetWI 142–159.

Male measurements (n=5). HL 0.42–0.44; HW 0.38–0.46; SL 0.11–0.12; WL 0.73–0.77; PrL 0.04–0.08; PrW 0.15–0.26; PetNL 0.10–0.12; PetW 0.17–0.18; PetH 0.14–0.16; PetL 0.15–0.16; T1L 0.24–0.25; T1W 0.29–0.30; TL 1.54–1.60; CI 90–106; SI 23–31; PetI 141–180; PetHI 93–100; PetWI 113–120.

Worker description. Body yellow to light brown. Integument covered by dense punctulate sculpturing; space between the punctures of lateral portion of frons corresponding to one or two puncture diameters in full-face view. Pubescence abundant over the entire body.

Head longer than broad; length of basal tooth and median tooth of mandible mainly subequal; basal margin of mandible straight. Clypeus evenly rounded anteriorly. Twelve antennomeres; antennomeres 1–4 separated by deep constrictions. Eye placed immediately posterior to the head midlength.

Pronotum slightly broader than long. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to half the diameter of the spiracle; distance between the propodeal spiracle and the propodeal dorsum corresponding to three spiracular diameters.

Petiolar node as long as high. Subpetiolar process forming a relatively broad lobe, with its anterior and posterior margins subparallel; posterior margin concave; posteroventral angle obtuse.

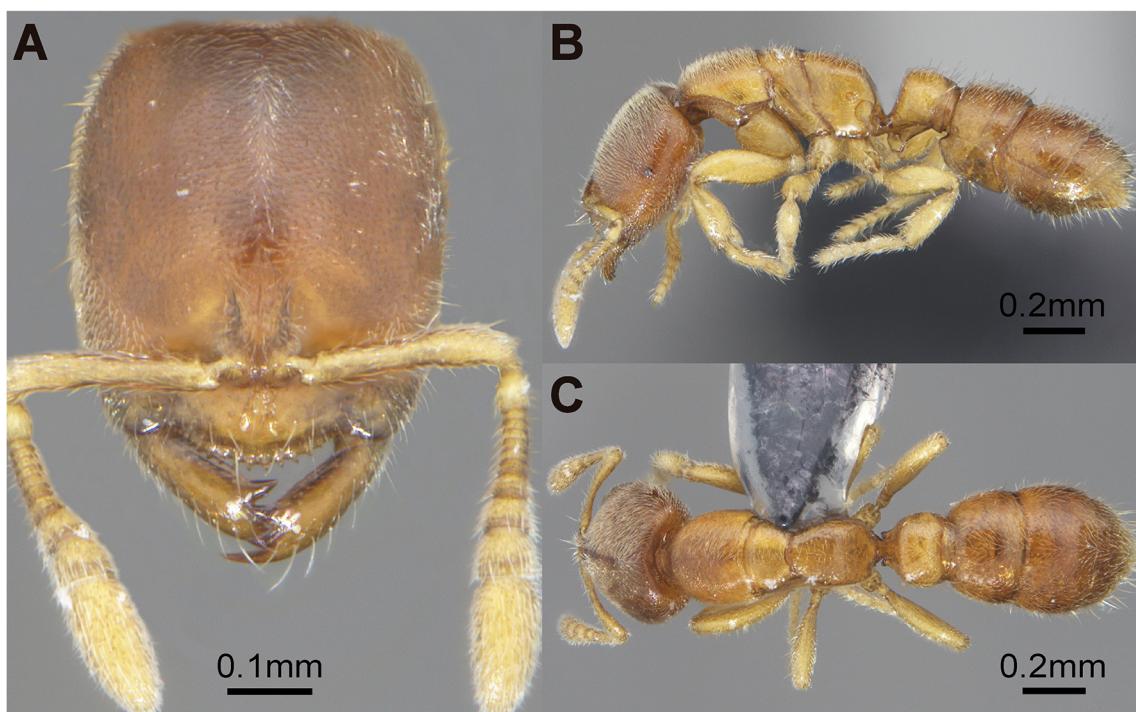


FIGURE 18. Holotype worker of *Prionopelta dubia* (Bolivia, Beni). A. Full-face view; B. Lateral view, C. Dorsal view. Specimen: DZUP549772.

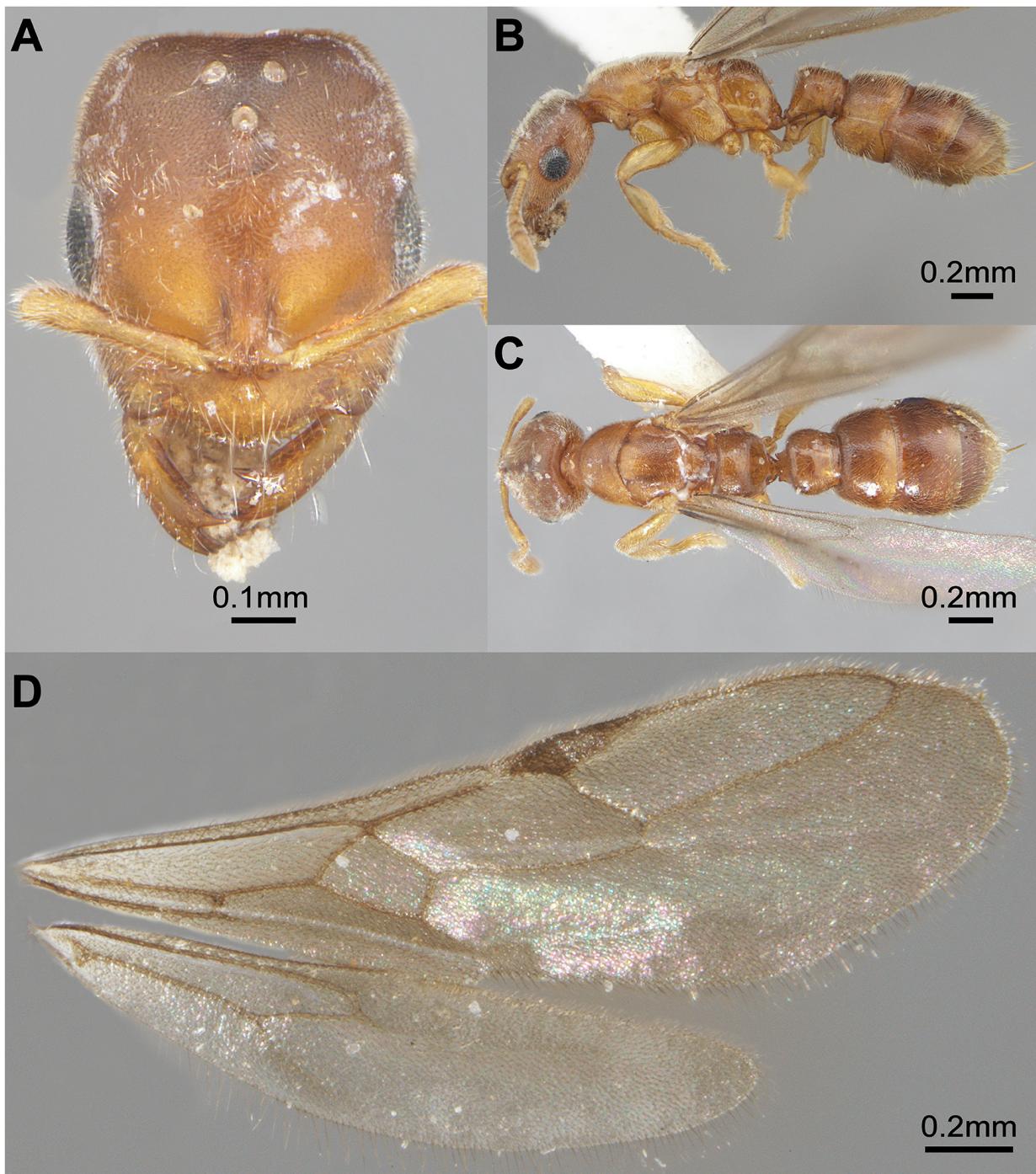


FIGURE 19. Queen of *Prionopelta dubia* (Brazil, Bahia). A. Full-face view; B. Lateral view; C. Dorsal view; D. Wings (Costa Rica, Península de Osa, Corcovado, Specimen: LACM ENT 142624).

Queen. Distance between the propodeal spiracle and the propodeal dorsum corresponding to two spiracular diameters.

Male. Anterior clypeal margin and frontoclypeal suture medially rounded. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to half or less than half spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to two spiracular diameters.

Etymology. The name refers to the authors' doubts regarding the identity of this species in several stages of this work, and its historical misinterpretation in scientific collections and repositories, where the individuals have been mainly confused with *P. amabilis*. From Latin *dubium*= doubt.

Distribution (Fig. 35A). *Prionopelta dubia* is known from southwestern Mexico to southeastern Brazil.

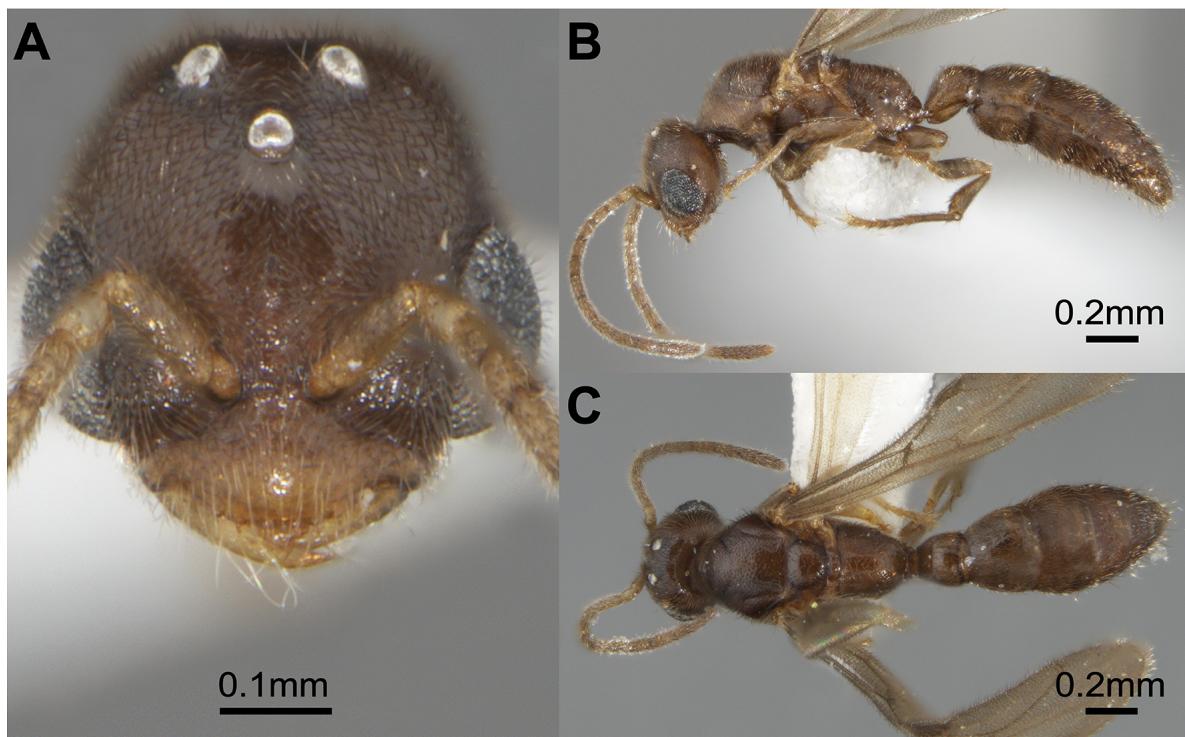


FIGURE 20. Male of *Prionopelta dubia* (Brazil, Bahia). A. Full-face view; B. Lateral view; C. Dorsal view.

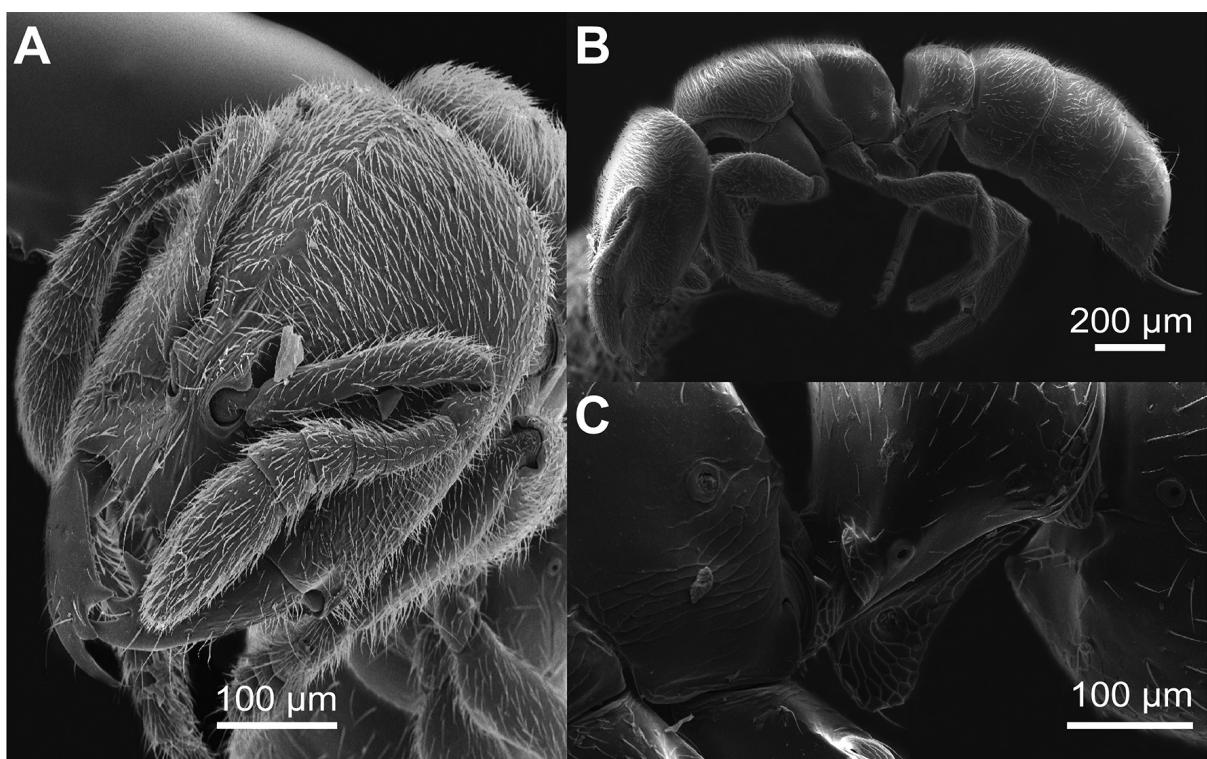


FIGURE 21. Worker of *Prionopelta dubia* (Peru, Cusco). A. Head dorsum, note the sculpturing, pilosity and detail of median tooth of mandible; B. Habitus; C. Detail of subpetiolar process, also note the posteroventral propodeal lobe and the petiolar tergite anterior carina.

Comments. Besides its diagnostic characters, the species is recognized by its abundant pilosity.

This species is commonly confused with *P. amabilis*. This may be related to the fact that the holotype of *P. amabilis* had not been photographed nor deposited in an open database of images. These issues were resolved at the end of 2019. Despite a thorough description of *P. amabilis* by Borgmeier (1949), *Prionopelta* comprises ants with subtle differences among its species, and consequently, the probability of misinterpretation is greater.

Here, we were able to establish the true identity of *P. amabilis* and to recognize differences between it and *P. dubia*. *Prionopelta dubia* and *P. amabilis* are broadly sympatric. They are similar in being shallowly punctate on the head dorsum and having a broad subpetiolar process. *Prionopelta dubia* has more closely-spaced puncta, the clypeus is evenly rounded, and the basal and median tooth of mandible tend to be similar in length. *Prionopelta amabilis* has more widely-spaced puncta, the clypeus slightly projecting medially, and the basal tooth of the mandible is distinctly larger than the median tooth.

In Central America and some localities of Peru, Ecuador and Bolivia, *P. dubia* may be more conspicuously pubescent and posterior portions of the head may be more infuscated. These traits are gradually less visible in specimens occurring through southern Central American countries and almost imperceptible in the specimens from the remaining countries of South America.

Natural history. The species is mainly known from litter samples collected in tropical forests. It is reported at elevations of 50–1500m.

Longino (unpublished notes available on AntWeb.org) observed pleometrotic colony founding, with pairs of queens in small chambers under rotting bark.

Field notes by Lívia Pires do Prado and Rogério Rosa da Silva (#LPP_304), suggest that workers move very slowly and that the colonies inhabit fallen logs with a high degree of decomposition.

Additional material examined (211 specimens). **BELIZE:** Cayo District: Chiquibul, N.P., Doyle's Delight, Dry Creek Area, 16°29'23"S 89°02'45"W, 950m, 20-27.viii.2007, P.W. Kovarik col., CASENT0614798 (1 queen) [J TLC]. **BRAZIL:** Acre: Mâncio Lima, Serra do Divisor, Barreiro, 07°27'9.22"S 73°39'58.24"W, 260m, 15-18.xi.2016, R.M. Feitosa, T.S. Silva & A.C. Ferreira cols. (2 workers, 1 queen) [DZUP]. Porto Water, 08°15'31.2"S 72°46'37.1"W, 05.ii-17.iv.1997, J. Caldwell col., E. hahnelii (1 worker, 1 queen) [CEPEC]. Amazonas: 19.ix.1962, W.L. Brown col., Benjamin Constant AM, (6 workers, 1 queen) [MZSP]. Balbina, 19.iv-02.v.1988, N. Degalier col., armadilha de interceptação, isca de fezes humana (1 queen) [MPEG]. Manaus, 23.i.1994, A.G. Casimiro col., #4832, Rs3304, (1 worker) [CEPEC]; same data, Rio Branco Rd. Km 4 from fork of Amaz. Rte 1, -7.730534 -61.832043, 22.viii.1962, W.L. Brown col., W-292, berlesate, rainforest, CASENT0172305 (1 worker) [ANIC]. Pres. Figueiredo, I. PE Inchado, L. Balbina, 1°54'45"S 59°29'75"W, 13.xii.1994, Queiroz col., arm. de solo, mata primaria (1 queen) [DZUP]. Bahia: Aritaguá, 23.xi.1998, J.R.M. Santos col., cacaual (1 worker) [CEPEC]; (2 workers) [DZUP]. Barrolândia, CEPLAC, 16°06'S 39°17'W, 06-07.iv.2002, L.S. Ramos & S. Lacau cols., 66 (4 workers) [DZUP]. CEPEC, 14.ii.1991, B. Santos col., #4377 (1 worker) [MZSP]. Ibicaraí, km 41, 14537s 0392901w, 21.xi.1998, Santos J.R.M. col. (2 workers, 1 queen) [CEPEC]. Iguaí, 14°38'38"S 40°09'12"W, 907m, 2011-2012, Santos R. e cols., Winkler, submontane, ombrophylous (1 worker) [CEPEC]. Ilhéus, Cacaual, v.1998, Carmo, J.C.S. col. (2 workers) [DZUP]; same data, 27.vii.2000, S. Lacau col. (1 worker, 1 queen, 1 male) [CEPEC]; same data, 16.i.1991, B. Santos col., #4377 (1 queen) [DZUP]. CEPLAC, Curso Poneromorfas, 14°46'27.6"S 39°13'16.7"W, 05.v.2014, Silvestre *et al.* cols. (1 worker) [UFGD]. Itati, Serra das Piabas, 13°57'26"S 40°01'51"W, 800m, 16-19.xi.2004, Lacau L. & Jahyny, J. cols. (4 workers) [CEPEC]. Jussari, Anuri, 152530S 0392719W, 27.v.1999, Santos, J.R.M. col., 66 (1 queen) [CEPEC]. Uruçuca, 12.viii.1991, Santos B. col., #4463, Emarc_Q. 5 (2 workers) [DZUP]. Goiás: Cavalcante, Serra da Contenda, 13°29'42.4"S 47°33'01.6"W, 15.x.2004, Silva R.R. & Dietz B.H. cols., Winkler, mata ciliar (4 workers) [MZSP]. Pará: Ald. Araçu, Igar. Urupi-Uma, 4.v.1963, B. Malkin col. (2 workers) [MZSP]. Belém, 13.xi.1974, D. Dias col., #13282 (2 workers) [MPEG]; same data, 12-19.viii.1962, K. Lenko col. (3 workers) [MZSP]; same data, Sampaio (1 worker) [MZSP]. Curionópolis, Projeto Antas do Norte, T1, 2.60577S 48.86185W, 06.iv.2017, M.G.T. Tavares col., Winkler (1 worker) [MPEG]. Fazenda Velha, 04.xii.1974, MF Torres (1 worker) [MPEG]; (1 worker) [DZUP]. Curionópolis, Projeto Antas do Norte, T1, 06°13'47.1"S 49°45'20.5"W, 5-7.viii.2017, M.G.T. Tavares col., Winkler (1 worker) [MPEG]. Itaituba, Mina do Palito S2, 06°19'39.8"S 55°47'31.5"W, 02.ii.2018, Silva R.R. & Prado L.P. cols., #LPP_304, busca ativa (1 worker) [MPEG]. Marituba, 1°22'S 48°20'W, 19.x.2004, Santos, J.R.M. col., 21 (1 queen) [DZUP]. Mocombo, 06.ii.1979, M.F. Torres col. (1 queen) [MPEG]. Paragominas, 2°59"S 47°21'W, i-vii.2011, R. Solar col., baited pitfall, UFV LABECOL n° 000157 (1 queen) [UFV]. Tailândia, Agropalma Área 4, 2.61787S 48.87190W, 18.vi.2016, R.R. Silva & E.L. Siqueira cols., Winkler (1 worker) [MPEG]; same data, Dendê 2, 2.60577S 48.86185W, 20.vi.2016, R.R. Silva & E.L. Siqueira cols., Winkler (1 worker) [MPEG]. Paraná: Rondon, iv.1965, F. Plaumann col., #4767 (3 workers, 1 queen) [MZSP]. Rondônia: Porto Velho, Área Abunã, 9°38'05.6"S 65°27'11.2"W, 17-27.vii.2013, Mazão G.R. & Probst R.S. cols. (1 worker) [DZUP]. São Paulo: Caraguatatuba, Res. Flor. 40m, 22.v-1.vi.1962, Exp. Dep. Zool. (1 worker) [MZSP]; same data, vii.1965 (1 worker) [MZSP]. Miracatu, Serra do Mar, Clube Pesca & Cia, 04-07.ix.2014,

Feitosa R.M. col., Winkler (1 worker) [MZSP]. Picinguaba, P.E. Serra do Mar, 23°20'10"S 44°50'15.3"W, 30.iii-04.iv.2001, Brandão C.R.F. e Eq. cols. Winkler (6 workers) [DZUP]; (3 workers) [MZSP]. São Vicente, Pq. Estadual do Xixová-Japui, 23°59'S 46°23'W, 18.iv.2011, Rodolfo da Silva Probst col., Winkler (2 workers) [DZUP]; (1 worker) [MZSP]; same data, 23.iv.2011(4 workers) [MZSP]; same data, 25.vii.2011, Winkler (1 worker) [MZSP]. **Tocantins:** Araguaína, 01.iv.2016, W.H. Brandão & V.E. Sandoval cols., ANTWEB1032566 (1 queen) [UFV]. **COLOMBIA:** Amazonas: 7km N. Letícia, 10-25.ii.1972, S.J. Peck col., en hojarasca CASENT0810431 (1 worker) [MIZA]. Isla Gorgona: M.L. Baena col., GAcld13 (1 worker) [MZSP]; same data, Gaed 21 (1 queen) [MZSP]. **COSTA RICA:** Alajuela: Bijagua, 10.71400 -85.03600 ±2km, 1000m, 15-19.viii.2010, M. Pollet & A. De Braekel-eer cols., pan trap, wet forest, CR/HE/PR/BPT01-05, CASENT0636122 (1 queen) [JTLC]. Río Peñas Blancas, 10.302N 34.706W, 940m, 04.vii.1984, J. Longino col., within day coll. no 1-stray, LACM ENT 142626 (1 worker) [JTLC]; same data, 10°18'N 84°45'W, 950m, 02.ii.1994, #3528, INBIOCRI001282968 (1 queen) [JTLC]. **Limón:** Res. Biol. Hitoy-Cerere, 9.65238 -83.02206 ±25m, 670m, 11.vi.2015, ADMAC, #Wm-E-02-1-06, ex. sifted leaf litter, tropical rainforest, CASENT0637017 (1 worker) [JTLC]; same data, 9.65727 -83.02598 ±25m, 530m, #Wm-E-02-1-03, CASENT0632087 (1 queen) [DZUP]. Río Pacuare, 10°01'N 83°31'W, 200m, 20.ii.1994, J. Longino col., #3576, INBIOCRI001282736 (1 worker, 1 male) [JTLC]. **Puntarenas:** 13km SSW Pto. Jimenez, 8.40667 -83.32833 ±200m, 200m, 10.iii.2008, J. Longino col., #6209-38, ex. sifted leaf litter, tropical rainforest, CASENT0636083 (1 worker) [JTLC]; CASENT0636084 (1 worker) [DZUP]. Península de Osa, Corcovado, Rio Pavo, 16.vii.1982, J. Longino col., #1200, LACM ENT 142624 (1 queen) [JTLC]. **ECUADOR:** Cuyabeno: 12.x-05.xi.1994, J.P. Caldwell col., #10750 (1 worker) [CEPEC]. **Morona:** Santiago, Los Tayos, 3.viii.1976, Tjite de Vries col. (1 queen) [MZSP]; (1 queen) [DZUP]. **Napo:** Limoncocha, 00°24'S 76°36'W, 20.vii.1973, C.W. Rettenmeyer col., #5300 (1 worker) [MZSP]; same data, 280m, 13.viii.1973, Marian Rettenmeyer, #68 (1 worker) [MZSP]; (1 worker) [DZUP]. **FRENCH GUIANA:** Kaw mountains, 04°38'N 52°18'W, ix.2008, S. Groc & A. Dejean cols., #5628, Winkler, VK3-Sous-le-vent, VK3 Tr1 W47, (1 worker, 1 queen) [DZUP]. Nouragues Natural Reserve, 4.08085 -52.68255, 200m, 28.viii.2018, C.R. Cardenas col., CRCI80828-02, Winkler (7 workers) [DZUP]; same data, 04°08'N 52°64'W, ix.2009, S. Groc & al cols., #5636, Winkler, FL2-Liana for., FL2 Tr2 W28 (1 worker) [CEPEC]. **Petit-Saut:** 02-28.xi.2001, S. Lacau & G. Fleck cols. (3 workers) [DZUP]; same data, xii.1997, S. Lacau col. (3 workers, 1 queen) [CEPEC]. **Saint-Laurent do Maroni:** Itoupé, 3.022305 -53.08321, 800m, 09.xi.2014, Orivel J. & Fichaux M. cols., IT14-0149, pitfall, Plateau, 72h, leaf litter, ECOFOG-IT14-0149-09 (1 worker) [ECOFOG]; same data, Mitaraka, 2.227554 -54.45371, 335m, 01.iii.2015, Orivel J. & Peticlerc F. cols., MI15-0244, Winkler, pente, 48h, leaf litter, ECOFOG-MI15-0244-52 (1 queen) [ECOFOG]. **Saül:** Belvédère de Saül, 03°37'22"N 53°12'57"W, 326m, 14.iii.2011, SEAG team leg., V05 (3 queens) [DZUP]. Limonade, 3.573583 -53.19847, 192m, 15.x.2013, Orivel J. & Donald J. cols., SL13-1022, pitfall, Bas fond, 72h, leaf litter, ECOFOG-SL13-1022-11 (1 worker) [ECOFOG]. Mont Chauve, 17.iv.1997, R. Garrouste col. (1 queen) [CEPEC]. **GUATEMALA:** Zacapa: 2km SE La Unión, 14.95384 -89.27631 ±50m, 1430m, 12.v.2009, LLAMA cols., #Wa-B-03-2-27, ex. sifted leaf litter, treefall gap in cloud forest, CASENT0612530 (1 queen) [JTLC]; same data, 3.5km SE La Unión, 14.95000 -89.26667, 1500m, 04.vi.1991, R.S. Anderson col., #91-050, CASENT0603554 (1 worker) [JTLC]. **HONDURAS:** Comayagua: PN Cerro Azul Meambar, 14.86613 -87.89735, 940m, 21.v.2010, LLAMA cols., Wm-C-04-1-03, MaxiWinkler, ex. sifted leaf litter, montane rainforest, CASENT0617263 (1 worker) [JTLC]. **MEXICO:** Chiapas: 13.7km NW Metzabok, 17.190517 -91.73748, 540m, 14.vii.2007, J. Longino col., JTL6046-s, Winkler, wet forest, JTLC000010047 (1 worker) [JTLC]. 12mi NW Ocozocoautla, 1200ft, 04-05.ix.1973, A. Newton col., CASENT0810416 (1 queen) [MIZA]. Playón de la Gloria, 16.16014°N 90.90187°W, 160m, 25.vi.2008, B. Broyles col., #0014, mature wet forest, CASENT0610361 (1 queen) [JTLC]; CASENT0610360 (1 worker) [DZUP]. **Oaxaca:** Uluapan, 4km NE Ayautla 18.06188 -96.64635±50m, 640m, 11.vi.2016, J. Longino col., #9624.1, mature wet forest, in dead wood, CASENT0631829 (1 worker) [JTLC]. **Veracruz:** Est. Biol. Los Tuxtlas, vii.2001, A. Pezon col. (1 worker) [DZUP]; same data, 18.58038 -95.08110 ±20m, 420m, 30.v.2016, ADMAC, #Wm-F-01-1-05, ex. sifted leaf litter, tropical rainforest, CASENT0640286 (1 worker) [JTLC]; CASENT0640281 (1 queen) [DZUP]; same data, 18.58461 -95.07375 ±20m, 150m, 31.v.2016, J. Longino col., #9558.2, mature wet forest, in dead wood, CASENT0631748 (1 worker) [JTLC]; CASENT0631749 (1 male) [DZUP]; same data, 10km Sontecomapan, 18.58333 -95.08333, 200m, 20.iii.1985, P.S. Ward col., PSW07333-12, sifted litter (leaf mold, rotten wood), CASENT0260460 (3 workers) [PSWC]. **NICARAGUA:** Chontales: 2.5km NE Santo Domingo, 12.27678 -85.06368 ±50m, 730m, 21.iv.2011, J. Longino col., #JTL7381, wet forest, under large stone, CASENT0619329 (1 worker) [JTLC]; CASENT0619921 (1 queen) [JTLC]; same data, 12.27641 -85.06350 ±100m, JTL7365-s, Winkler,

wet forest, CASENT0619986 (1 worker) [JTLC]. **Jinotega:** Cerro Saslaya, 13.77199 -84.99771±20m, 710m, 08.v.2011, LLAMA cols., #Wm-D-02-1-09, ex. sifted leaf litter, montane wet forest, CASENT0628800 (1 queen) [JTLC]; CASENT0628797 (1 worker) [JTLC]. **PANAMA: Darién:** Reserva Chucantí, 8.78803 -78.45035 ±50m 720m, 20.i.2015, J. Longino col., #9071, ex. sifted leaf litter, moist forest, CASENT0633570 (1 worker) [JTLC]. **PERU: Cusco:** Est. Biol. Villa Carmen, -12.894740° -71.403850, 520m, 5-15.viii.2013, Ant Course 2013, successional vegetation, crops and pasture (2 workers) [DZUP]; (1 worker) [NHMB]; same data, 29.vii.2013, B.L. Fisher & F.A. Esteves cols., BLF31444, successional vegetation, crops and pasture, ex. soil 10cm below ground, CASENT0370886 (1 worker) [CASC]; same data, -12.90244 -71.40767, 590m, 06-08.viii.2013, B.L. Fisher & F.A. Esteves cols., BLF31553, bamboo forest, secondary vegetation, sifted litter, miscellaneous collection, not a nest series, CASENT0374727 (1 worker) [CASC]; CASENT0375939 (1 worker) [CASC]. Quincemil, km 8, 13°13'03"S 70°43'40"W, 633m, 20.viii-1.ix.2012, Cavichioli R., Santos & Takiya cols., Malaise (2 males) [DZUP]. **Divisoria:** 02.iv.1988, SJS16 (3 workers) [CEPEC]. **Madre de Dios:** Puerto Maldonado, Sachavacayoc Centre, 12°51'15.4"S 69°22'15.9"W, 209m, 19-31.vii.2012, Ant Course (2 workers) [DZUP]; same data, R. Feitosa col. (5 workers) [DZUP]. Reserva Nacional Tambopata, Sachavacayoc, 12°51'21"S 69°21'43"W, 210m, 19-31.vii.2012, J. Chaúl col., manual, Neotropical Ant Course, UFV LABECOL n° 000041 (1 worker) [UFV]; same data, UFV LABECOL n°000045 (1 worker) [UFV]. **San Martín:** Davidcillo, 20km NNE Tarapoto, 6°15'S 76°15'W, 220m 21.viii.1986, P.S. Ward col., #8684-1, sifted litter (leaf mold, rotten wood), rainforest, PSW10127-2, CASENT0863188 (2 workers) [PSWC]. **SURINAME: La Poule:** viii.1959, I.v.d. Drift col., 18.xivcd.13, (3 workers) [DZUP]; (3 workers) [MZSP]. **VENEZUELA: Aragua:** Est. Biol. Rancho Grande, 10.34756°N 67.68787°W, 1140m, 11.x.2008, J. Longino col., #6439-s, ex. sifted leaf litter, montane wet forest, JTLC000015024 (1 worker) [JTLC]. PN Henri Pittier, Paso Portachuelo, 10.34761°N 67.68780°W, 1100m, 11.viii.2008, C. Rabeling col., 080811-02 (1 queen) [ASU]. Henri Pittier National Park, Valle Santa Maria, 4.8km SW Cumboto, 10.36667 -67.82667, 860m, 03.ix.2003, E. Rodríguez, A. Grotto & J. Lattke cols., JEL2832, La Esperanza, Bosque Semi deciduo, ex. hojarasca, CASENT0178695 (1 worker) [MIZA]. Paso Portachuelo, PN Henri Pittier, 10.34761°N 67.68780°W, 1100m, 9-19.viii.2008, Ant Course, #1211, cloud forest (2 queens) [MZSP]. **Bolívar:** 10km Icabarú, 700m, 05.vii.1987, corteza árbol y musgo, CASENT0810411 (1 queen) [MIZA]. Rio Cuyuni, 66 km, 6°09'N 61°30'W, 250m, 11.viii.1986, P.S. Ward col., 8537.1, sifted litter, leaf mold, rotten wood, rainforest, CASENT0810417 (2 workers) [MIZA]. **Miranda:** 220m, P.N. Guatopo, Qda. La Culebra, Via Sta. Teresa, Agua Blanca, 18.viii.1984J. Lattke col., #560, CASENT0810415 (2 workers) [MIZA]; same data, 35km N Altamira, Guatopo NP Agua Blanca, 400m, 31.v.1988, S.J. Peck col., hojarasca quebrada, CASENT0810420 (1 worker) [MIZA]. **Portuguesa:** Qda. La Guata, 12km de Biscucuy, 600m, 21.v.1983, J. Lattke col., CASENT0810419 (1 worker, 1 male) [MIZA]; #462, CASENT0810421 (1 worker, 1 queen) [MIZA]; #466, CASENT0810422 (2 workers, 1 male) [DZUP]. **Táchira:** S. Cristóbal, La Florida, Rd. Caño Seco, La Blanca, 1125m, 09.xii.1985, J. Lattke & W.L. Brown cols., CASENT0810409 (3 workers) [DZUP]; CASENT0810410 (1 worker) [MIZA]; CASENT0810410 (1 queen) [MIZA].

Prionopelta menininha sp. n.

Figures 22, 35B

Holotype worker: BRAZIL: Bahia: São Desidério, Gruta do Catão, Epígeo, 03.xi.2012, SDes146, DZUP549778 (1 specimen) [DZUP].

Paratype worker: same data as holotype, DZUP549779 (1 specimen) [DZUP].

Diagnosis. Lateral portion of frons deeply sculptured in full-face view. Eleven antennomeres. Subpetiolar process forming a relatively broad lobe; posteroventral angle of subpetiolar process obtuse. T1W greater than 0.40mm.

Holotype measurements. HL 0.54; HW 0.50; SL 0.30; WL 0.68; PrL 0.28; PrW 0.36; PetNL 0.24; PetW 0.30; PetH 0.22; PetL 0.22; T1L 0.30; T1W 0.46; TL 1.74; CI 92; SI 60; PetI 125; PetHI 100; PetWI 136.

Worker measurements (n=5). HL 0.54–0.56; HW 0.46–0.50; SL 0.28–0.32; WL 0.60 –0.70; PrL 0.24–0.28; PrW 0.30–0.36; PetNL 0.16–0.24; PetW 0.28–0.32; PetH 0.20–0.22; PetL 0.18–0.22; T1L 0.26–0.30; T1W 0.42–0.46; TL 1.58–1.76; CI 85–92; SI 56–66; PetI 125–200; PetHI 100–122; PetWI 136–177.

Worker description. Body light brown. Integument covered by deep and dense punctate sculpturing; space between the punctures of lateral portion of frons corresponding to one or almost two puncture diameters.

Head slightly longer than broad; length of median tooth of mandible shorter than basal tooth; basal margins of mandibles convex. Clypeus evenly rounded. Eleven antennomeres; antennomeres 1–4 separated by shallow constrictions. Eye placed at the midlength of the head.

Pronotum broader than long. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to one spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to three spiracular diameters.

Petiolar node slightly higher than long. Subpetiolar process forming a relatively broad lobe, with its anterior and posterior margins subparallel; posterior margin concave; posteroventral angle obtuse.

Queen. Unknown.

Male. Unknown.

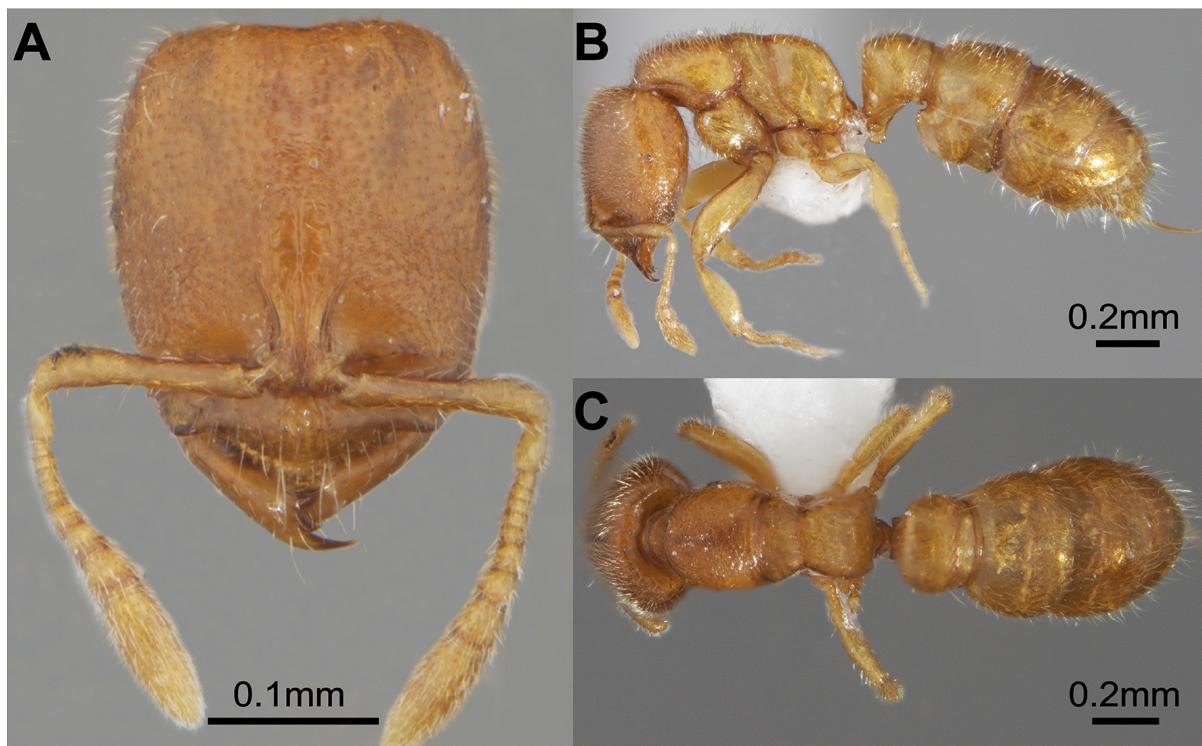


FIGURE 22. Holotype worker of *Prionopelta menininha* (Brazil, Bahia). A. Full-face view; B. Lateral view; C. Dorsal view. Specimen: DZUP549778.

Etymology. The species is named in honor of Maria Escolástica da Conceição Nazaré, also known as “Mãe Menininha do Gantois”, a descendant of the Nigerian Yoruba royalty enslaved in Brazil, and one of the most prominent Brazilian *iyalorixá* (spiritual leader of the Afro-Brazilian religion *Candomblé*). The species name is a recognition to the Afro-Brazilian religions and community, and to the state of Bahia, from where *P. menininha* is mainly known. The specific epithet is a Portuguese noun in apposition, indeclinable in accordance to articles 31.2.1 and 31.2.3 of the International Code of Zoological Nomenclature.

Distribution (Fig. 35B). The species is known from northeastern and southeastern Brazil, in the states of Bahia, Ceará, and Minas Gerais.

Comments. This species can be confused with *P. punctulata* and *P. tapatia* because of the presence of eleven antennomeres. However, morphological features allow the separation of these three species. *Prionopelta punctulata* has the clypeus strongly projecting medially and the subpetiolar process with margins apically convergent, in contrast to *P. menininha*. It can be distinguished from *P. tapatia* mainly by the obtuse posteroventral angle of the subpetiolar process, acute in *P. tapatia*. Also, *P. menininha* has the petiolar node and the first gastral segment wider and longer than *P. tapatia*. Finally, so far, *P. tapatia* is a species endemic to Mexico.

Natural history. Most specimens are known from pitfall and soil samples collected in dry forest areas.

Additional material examined (5 specimens). **BRAZIL: Bahia:** Itaberaba, Faz. Riacho do Uruçu, 5.xii.1990, CRF Brandão, JLM Diniz & PS Oliveira cols., (1 worker) [MZSP]. Salvador, vii e x.2012, Melo T.S. col., (2 workers) [DZUP]. **Ceará:** Cratéus, São Luis, 05°08'S 40°51'W, 20-30.iv.2003, Y. Quinet col., pitfall, mata seca (1 work-

er) [MZSP]. **Minas Gerais:** Manga, Parque Estadual da Mata Seca, Estágio Intermediário, 26.ix.2008, Marques T. & estagiários, parcela 07, am. 3, estrato sub, UFV LABECOL n°000115 (1 worker) [UFV].

***Prionopelta minuta* sp. n.**

Figures 23–24, 35C

Holotype worker. BRAZIL: Rondônia: Itapuã do Oeste, Floresta Nacional do Jamari, -9.9780 -62.9780, 03-10.iii.2016, A.C. Ferreira & L. Cunha cols., Winkler, DZUP549780 (1 specimen) [DZUP].

Paratype workers. same data as holotype, DZUP549781 (1 specimen) [DZUP]; DZUP549782 (1 specimen) [DZUP]; DZUP549783 (1 specimen) [DZUP]; DZUP549784 (1 specimen) [DZUP]; DZUP549785 (1 specimen) [DZUP]; DZUP5490786 [DZUP]; DZUP549787 (1 specimen) [DZUP]; DZUP549788 (1 specimen) [DZUP]; DZUP549789 (1 specimen) [DZUP]; DZUP549790 (3 specimens) [MCZ]; DZUP549791 (2 specimens) [USNM]; DZUP549792 (3 specimens) [MZSP]; DZUP549793 (2 specimens) [INPA]; DZUP549794 (2 specimens) [ICN]; DZUP549795 (1 specimen) [MPEG].

Diagnosis. Lateral portion of frons with foveolate sculpturing nearly confluent and inconspicuous shiny interspaces appearing as small raised margins. Twelve antennomeres. Posterior margin of subpetiolar process straight.

Holotype measurements. HL 0.43; HW 0.37; SL 0.23; WL 0.51; PrL 0.22; PrW 0.25; PetNL 0.13; PetW 0.20; PetH 0.14; PetL 0.14; T1L 0.20; T1W 0.30; TL 1.28; CI 86; SI 62; PetI 153; PetHI 100; PetWI 142.

Worker measurements (n=7). HL 0.42–0.48; HW 0.36–0.40; SL 0.22–0.24; WL 0.48–0.51; PrL 0.20–0.23; PrW 0.24–0.27; PetNL 0.11–0.14; PetW 0.16–0.21; PetH 0.12–0.16; PetL 0.12–0.14; T1L 0.18–0.22; T1W 0.28–0.31; TL 1.24–1.32; CI 81–90; SI 55–63; PetI 114–175; PetHI 85–133; PetWI 114–175.

Queen measurements (n=1). HL 0.53; HW 0.48; SL 0.27; WL 0.73; PrL 0.15; PrW 0.31; PetNL 0.13; PetW 0.28; PetH 0.19; PetL 0.19; T1L 0.25; T1W 0.46; TL 1.70; CI 90; SI 55–63; PetI 215; PetHI 100; PetWI 147.

Worker description. Body light yellow. Integument covered by deep and dense foveolate sculpturing with inconspicuous shiny spaces between the fovea on the lateral portion of frons, appearing as small raised margins in full-face view. Pubescence abundant over the entire body.

Head longer than broad; length of median tooth of mandible shorter than basal tooth; basal margins of mandibles slightly convex. Clypeus evenly rounded to slightly projecting medially. Twelve antennomeres; antennomeres 1–4 separated by deep constrictions. Eyes placed immediately posterior to the head midlength.

Pronotum broader than long. Distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to one spiracular diameter; distance between the propodeal spiracles and the propodeal dorsum corresponding to almost two spiracular diameters.

Petiolar node as long as high. Subpetiolar process subtriangular, with anterior and posterior margins converging apically; posterior margin straight; posteroventral angle obtuse.

Queen. Distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to half spiracular diameter; distance between the propodeal spiracles and the propodeal dorsum equal to two spiracular diameters. Posteroventral angle of the subpetiolar process obtuse.

Male. Unknown.

Etymology. The name refers to the comparative small size of this species. From Latin, *minuta* = small.

Distribution (Fig. 35C). *Prionopelta minuta* is known from southwestern Colombia and northern Brazil.

Comments. This species can be confused with *P. modesta* since both have a dense foveolate sculpturing on the head dorsum and twelve antennomeres. Comparatively, *P. modesta* comprises larger ants, with interspaces between fovea of the lateral portion of frons moderately spaced and posterior margin of the subpetiolar process clearly concave. *Prionopelta minuta* groups smaller ants, with nearly confluent foveolate sculpturing and posterior margin of the subpetiolar process straighter. The last feature mentioned for *P. minuta* is useful to separate the species from other Neotropical members of the genus, as well as the body length of workers, always lesser than 1.40 mm.

Most of the specimens known so far for *P. minuta* come from the Amazon rainforests of the Brazilian states of Rondônia and Amazonas. The transitional areas between these forests and the Brazilian savanna (Cerrado) are extremely fire-sensitive, and anthropogenic activities related with deforestation for crop and livestock establishment as well as global warming have shown negative effects on their biodiversity (Pivello 2009; Shlisky *et al.* 2009; Silveira *et al.* 2013).

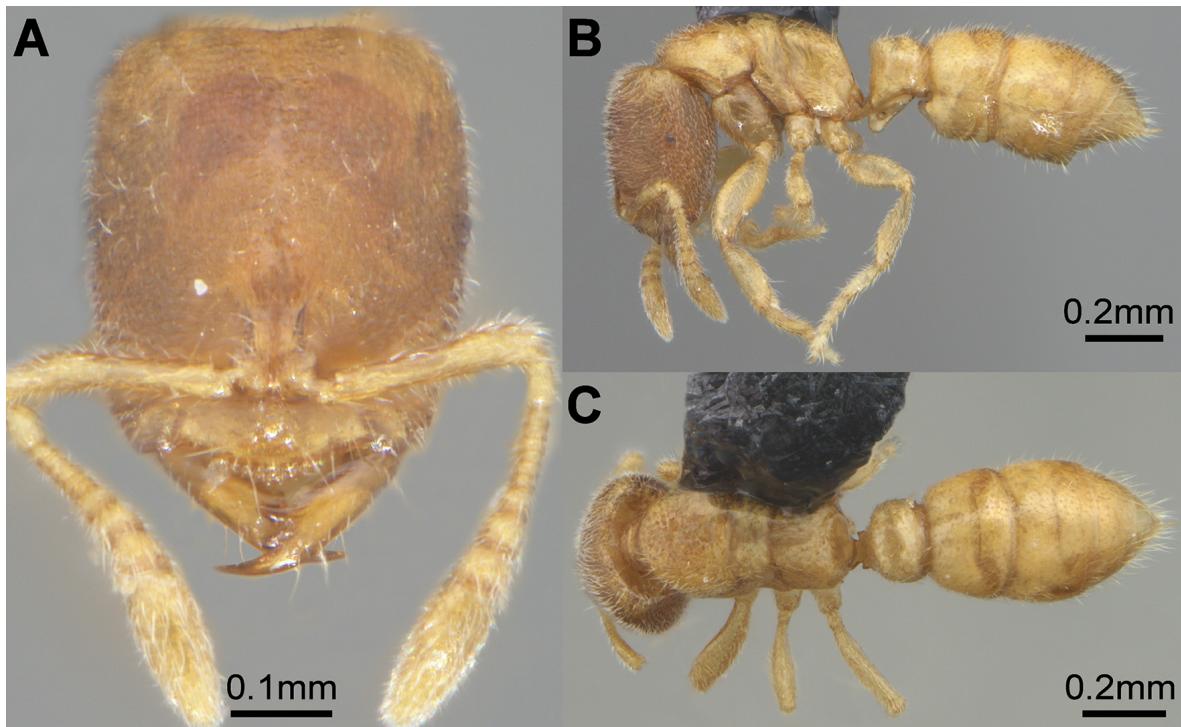


FIGURE 23. Holotype worker of *Prionopelta minuta* (Brazil, Rondônia). A. Full-face view; B. Lateral view; C. Dorsal view. Specimen: DZUP549780.

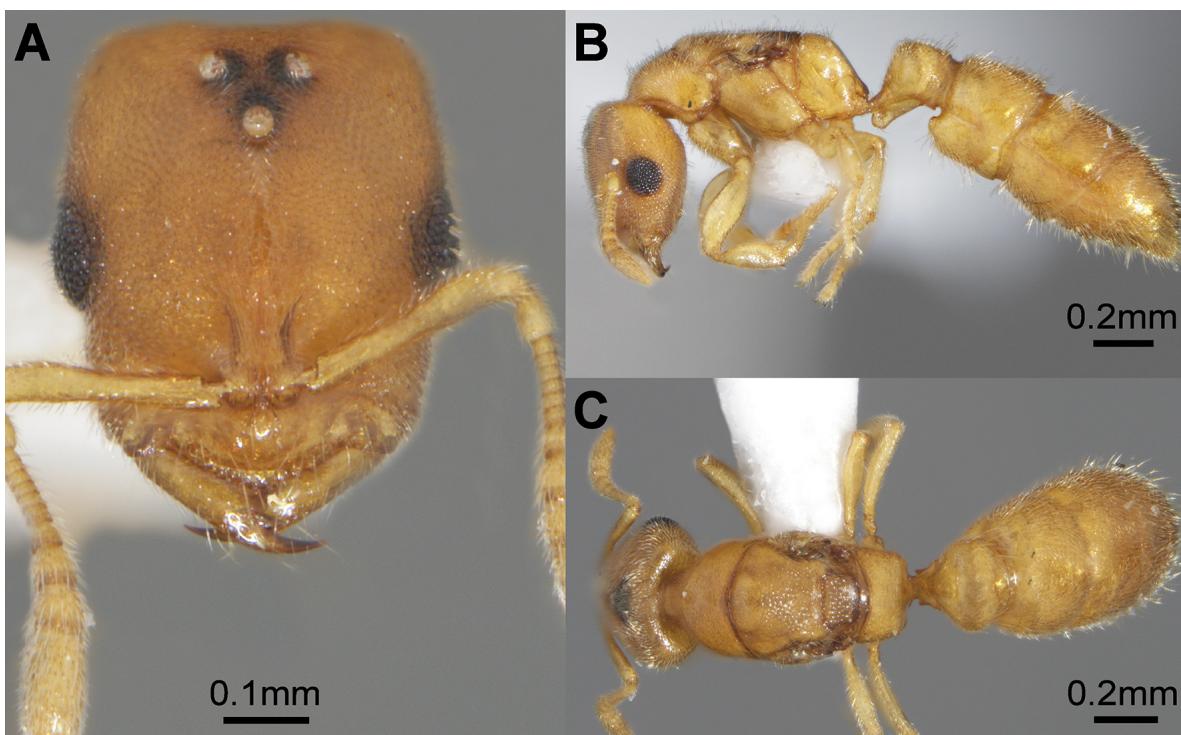


FIGURE 24. Queen of *Prionopelta minuta* (Brazil, Amazonas). A. Full-face view; B. Lateral view; C. Dorsal view.

Intriguingly, the species has been recorded in the lowlands of the central and meridional Brazilian Amazon and in the western slopes of the Andean mountain range, Colombia. Although we cannot presently discard the possibility that this species is widely distributed in the western Amazon realm, further collection records are required to confirm the disjunct distribution of *P. minuta*.

Natural history. The species is mainly known from leaf litter and dead wood samples collected in well preserved forests; reported at elevations of 152-1430m.

Additional material examined (126 specimens). **BRAZIL: Amazonas:** 59°48'W 2°25'S, 20.ix.1996, A.C. Maicedo e outros #1682, ZF3- Km 41 (2 workers) [INPA]. Lg. Marianill, 24Km NE of Manaus, ix.1962, W.L. Brown col., #4566 (4 workers) [MZSP]. Manaus, 13.xii.1993, A.B. Casimiro col. (1 worker) [CEPEC]; same data, 16.iv.1988, H. Vasconcelos, #4642 (5 workers) [CEPEC]; same data, 29.ix.1993, A.B. Casimiro col. (4 workers) [CEPEC]; same data, 10.xi.1993, A.B. Casimiro col., Rs1202 (10 workers) [INPA]; same data, 14.xii.1993, A.B. Casimiro col., 4832, Rs1301 (6 workers) [INPA]; same data, 23.i.1994, A.B. Casimiro col., #4832, Rs3114 (4 workers) [DZUP]; same data, 2°5'86"S 60°6'55"W, 20.x.2004, Baccaro e col., Winkler, TEAM-ZF-2-Km 14, B1-PO-0139, 1m2 de liteira (1 worker) [INPA]; B1-PO-0153 (1 worker) [INPA]; same data, 21.x.2004, B1-PO-0126 (1 worker) [INPA]; B1-PO-0137 (1 worker) [INPA]; B1-PO-0159 (1 worker) [INPA]; B1-PO-0160 (1 worker) [INPA]; B1-PO-0157 (1 worker) [DZUP]. Fazenda Experimental da UFAM, 2°39'17.4"S 60°03'31"W, 18e20. ix.2018, Almeida R.P.S. col., ninho em tronco em decompos. *Fulakora*, *Talaridris mandibularis* e *Pheidole* no tronco (1 queen) [DZUP]. Manaquiri, xi.2009, Winkler, T1 2/500 (4 workers) [DZUP]; T1 1/500 (10 workers) [INPA]; (4 workers) [DZUP]; T1 3/500 (5 workers) [INPA]; T2 2/500, (1 worker) [DZUP]; (10 workers) [INPA]; T2 3/500 (3 workers) [INPA]; (2 workers) [DZUP]; T2 4/500 [INPA]. Reserva Florestal Adolpho Ducke, 4.ix.1962, W.L. Brown Jr. col., M-169 (5 workers) [MPEG]; same data, 02°58'89.3"S 059°57'67.7"W, 07.xii.2005, TEAM Project, T1 1/500 (1 worker) [INPA]; (1 worker) [DZUP]; T2 3/400 (1 worker) [INPA]; T4 10/700 (2 workers) [INPA]; same data, -2.93333 -59.95, 152m, 03.viii.2006, J. Souza & P. Oliveira cols., ANTC10226, pitfall, 8PPBIO Grid, L-O 03, CASENT0179474 (1 worker) [CASC]; same data, 2°55'43"S 59°56'46"W, 08.viii.2004, Baccaro e col., Winkler, TEAM-Acamp. principal, 1m2 liteira, 2/000, amostra 3, A2-PO-0074 (2 workers) [INPA]; A2-PO-0073 (1 worker) [DZUP]; same data, 24.viii.2005 (2 workers) [INPA]; 9/300 (1 worker) [DZUP]; same data, 2°58'45"S 59°55'13"W, 24.i.2005, TEAM-Igarapé Ipiranga, 8/700 (1 worker) [INPA]; A1-PO-0003 (1 worker) [INPA]; (1 worker) [DZUP]; A1-PO-0020, 8/700 (1 worker) [DZUP]; A1-PO-0021 (1 worker) [DZUP]; same data, 02°58'89.3"S 059°57'67.7"W, 07.xii.2005, TEAM project, T1 1/500 (1 worker) [INPA]; same data, 13.ii.2007; C1 2/600 (1 worker) [DZUP]; same data, 15.ii.2007, IMA 2 9/300 (1 worker) [CASC]; same data, 29.xi.2006, T6 1/900 (10 workers) [INPA]; (2 workers) [DZUP]. Rio Branco Rd. Km 4 from fork of Amaz. Rte 1, -7.730534 -61.832043, 22.viii.1962, W.L. Brown col., W-292, berlesate, rainforest (1 worker) [ANIC]. **COLOMBIA: Nariño:** Barbacoas, 01°21'49"N 78°04'45"W, 640m, 25-27.vii.2006, A. Miranda & O. Reyes cols., Winkler (2 workers) [DZUP]. Territorio Kofán, 00°30'N 77°13'W, 1430m, 25.ix.1998, E. González leg., Winkler, T2 191(1 worker) [CEPEC]; same data (1 worker) [DZUP].

Prionopelta modesta Forel, 1909

Figures 25–28, 35C

Prionopelta modesta Forel, 1909: 241. Lectotype worker (here designated): GUATEMALA, Forel (the top specimen of a pin with 2 workers), CASENT0102527 [MHNG] (examined by images).

Diagnosis. Lateral portion of frons with foveolate sculpturing moderately spaced and conspicuous shiny interspaces appearing as small raised margins. Twelve antennomeres. Posterior margin of subpetiolar process concave.

Worker measurements (n=5). HL 0.50–0.54; HW 0.44–0.48; SL 0.26–0.28; WL 0.54–0.67; PrL 0.24–0.28; PrW 0.22–0.32; PetNL 0.13–0.18; PetW 0.23–0.28; PetH 0.16–0.21; PetL 0.16–0.17; T1L 0.24–0.26; T1W 0.34–0.39; TL 1.44–1.62; CI 84–88; SI 54–62; PetI 150–200; PetHI 100–123; PetWI 135–175.

Queen measurements (n=4). HL 0.48–0.58; HW 0.44–0.52; SL 0.27–0.30; WL 0.71–0.83; PrL 0.12–0.13; PrW 0.26–0.33; PetNL 0.14–0.16; PetW 0.24–0.29; PetH 0.18–0.23; PetL 0.14–0.20; T1L 0.23–0.33; T1W 0.37–0.45; TL 1.56–1.94; CI 89–91; SI 57–61; PetI 171–181; PetHI 115–128; PetWI 145–171.

Worker description. Body yellow to light brown. Integument covered by deep and dense foveolate sculpturing with conspicuous shiny spaces between the fovea on the lateral portion of frons, appearing as small raised margins in full-face view. Pubescence abundant over the entire body.

Head longer than broad; length of median tooth of mandible shorter than basal tooth; basal margin of mandible convex. Clypeus evenly rounded. Twelve antennomeres; apical ones separated by deep constrictions. Eye placed at the head midlength.

Pronotum almost as long as broad. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to one spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to two spiracular diameters.

Petiolar node as high as long. Subpetiolar process forming a relatively broad lobe, with its anterior and posterior margins subparallel or parallel; posterior margin concave; posteroventral angle obtuse.

Queen. Like workers, with the expected morphology of *Prionopelta* queens.

Male. Anterior clypeal margin medially rounded; frontoclypeal suture relatively trapezoidal and truncate medially.

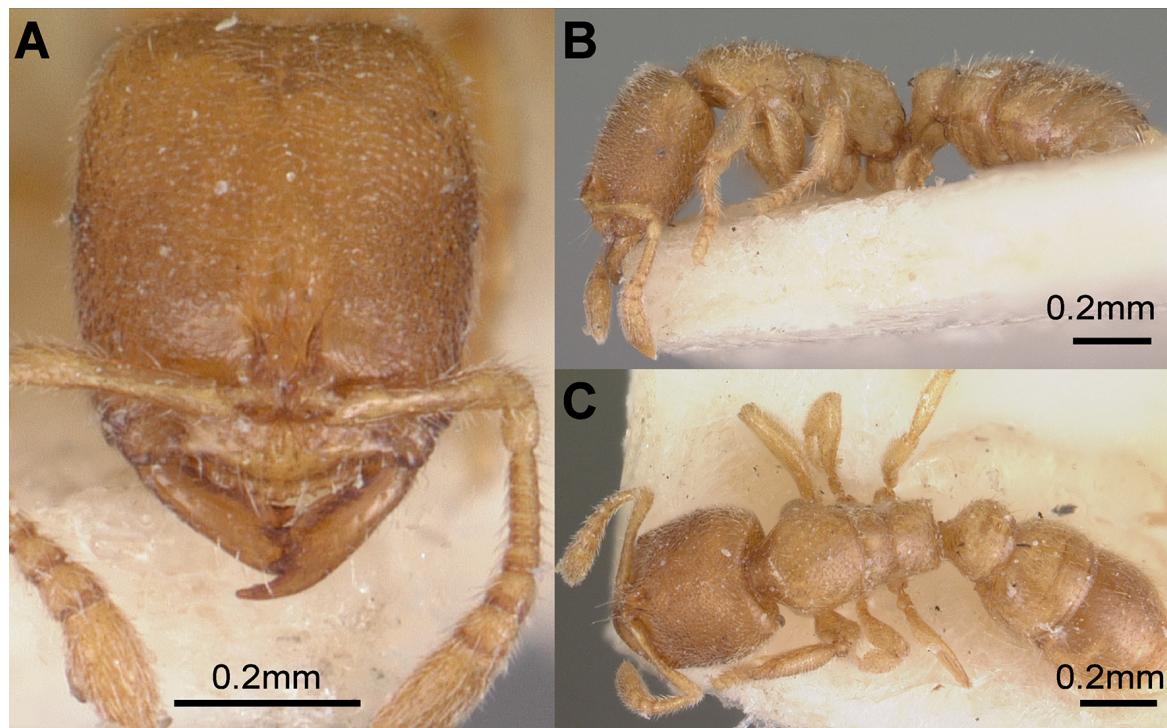


FIGURE 25. Lectotype worker of *Prionopelta modesta* (Guatemala). A. Full-face view; B. Lateral view; C. Dorsal view. Modified from AntWeb.org images by April Nobile, Specimen: CASENT0102527.

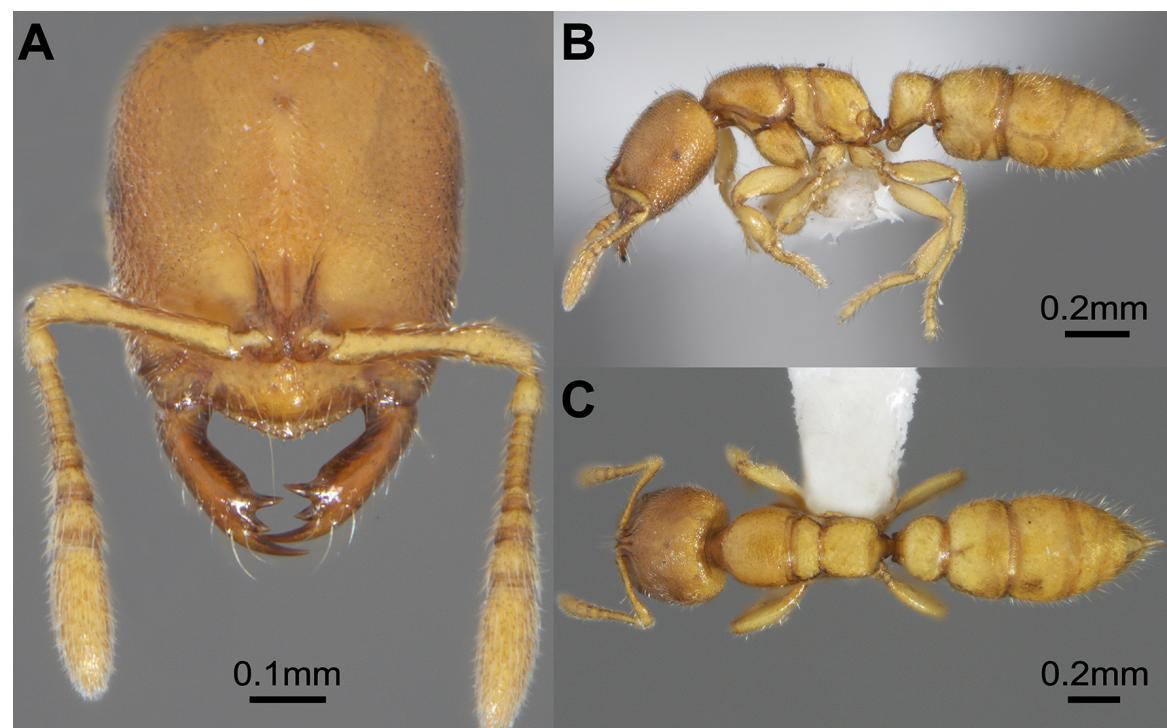


FIGURE 26. Worker of *Prionopelta modesta* (Costa Rica, Limón). A. Full-face view; B. Lateral view; C. Dorsal view. Specimen: CASENT0636747.

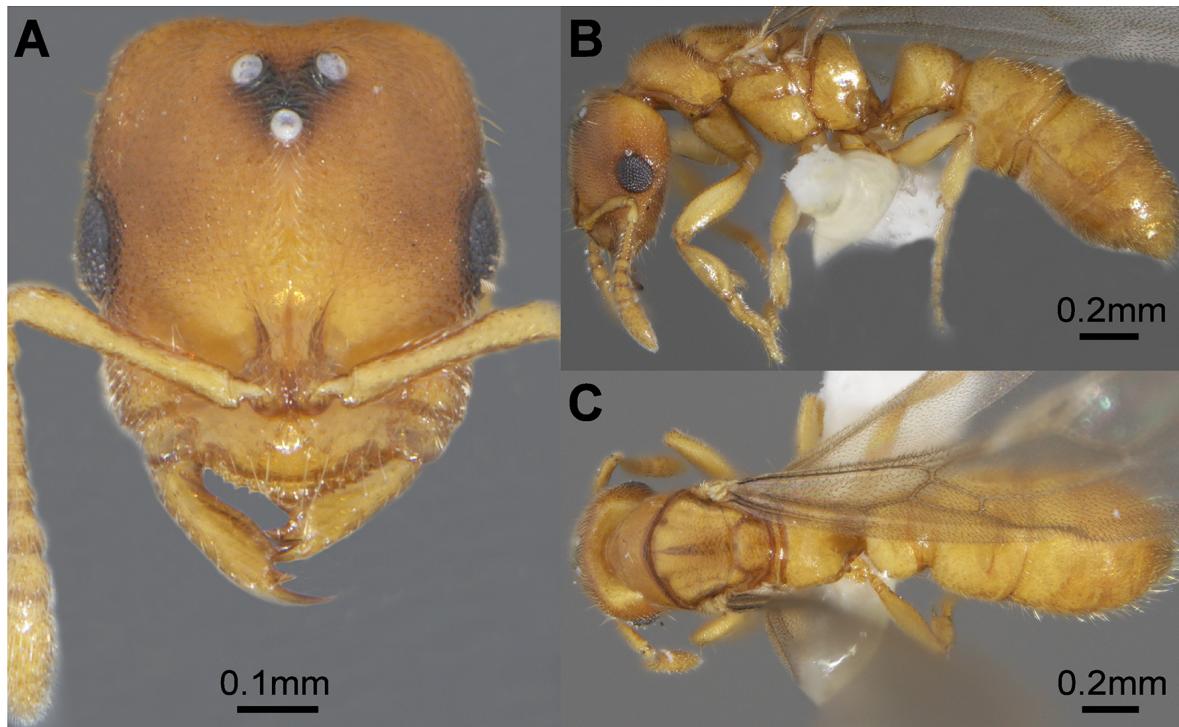


FIGURE 27. Queen of *Prionopelta modesta* (Mexico, Oaxaca). A. Full-face view; B. Lateral view; C. Dorsal view. Specimen: CASENT0640598.

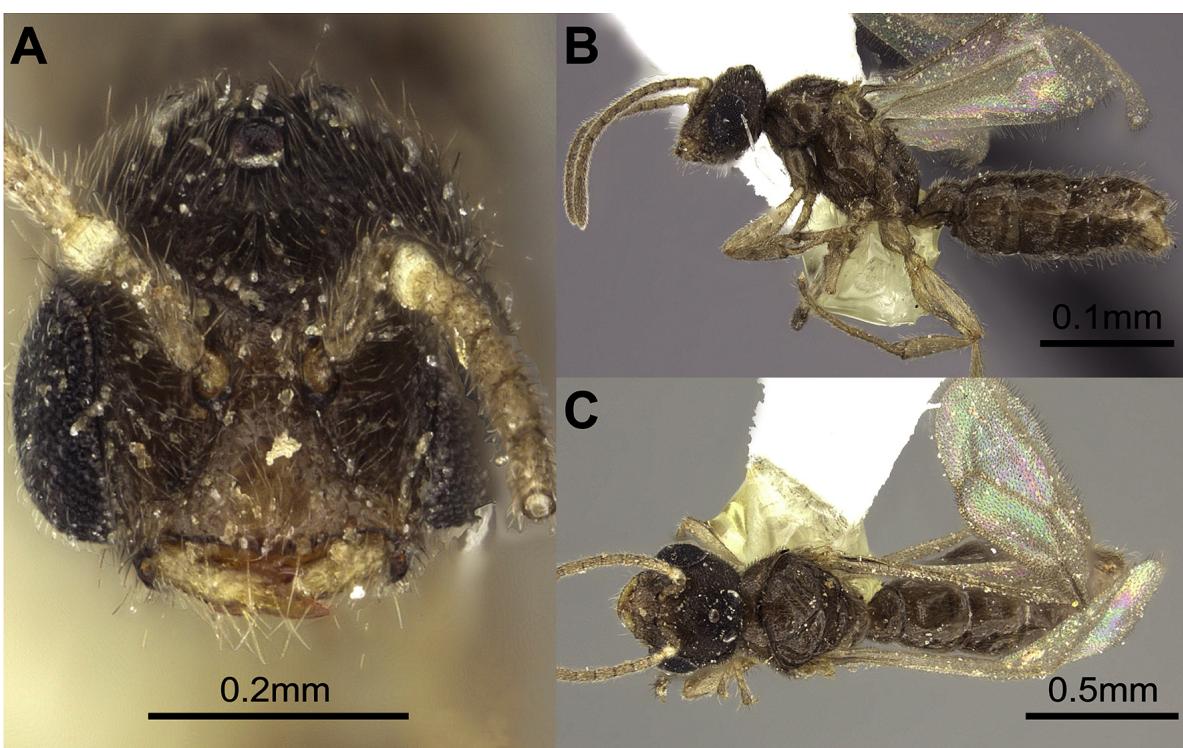


FIGURE 28. Male of *Prionopelta modesta* (Honduras, Comayagua). A. Full-face view; B. Lateral view; C. Dorsal view. Modified from AntWeb.org images by Will Ericson, specimen: CASENT0615793.

Etymology. Unknown.

Distribution (Fig. 35C). The species is known from northern Mexico to western Guyana.

Comments. The species was commonly considered as the only Neotropical *Prionopelta* with dense sculpturing on the head dorsum, giving the appearance of an opaque integument. Although this trait can be currently used

to separate *P. modesta* from the other species occurring in Central America, the densest and deepest sculpturing on head dorsum of all the Neotropical species described in this work belongs to *P. minuta*, from which *P. modesta* can be separated by the larger body size and the concave posterior margin of the subpetiolar process.

Prionopelta modesta is mostly distributed through Central America. Hence, the isolated records of the species in Guyana and Colombia are unexpected. We have examined a considerable number of *Prionopelta* specimens from Panama and Venezuela and we were not able to recognize any *P. modesta* individuals in these samples. At the same time, the *P. modesta* specimens from Guyana and Colombia, examined here, fit with the species diagnosis. Thus, further collection records would be useful to better understand the distribution pattern of the species.

Natural history. The species is mainly known from litter and dead wood samples collected in tropical forests; reported at elevations of 50-1840m.

According to observations available in Brown (1960) about several colonies of *P. modesta* collected at Pueblo Nuevo, Veracruz, Mexico, colonies appear to be split into sections and occupy bits of rotting wood or bark in the leaf litter. The individuals found in these fragments (workers or workers and larvae) could indicate a low level of organization or that the ants could be more or less nomadic. In a “cafeteria” experiment, several live and dead arthropods were offered, but, overall, just a timid response on the workers’ part was observed, with individuals mostly recoiling violently when their antennae came into contact with the potential prey. On the other hand, some specimens were capable of biting, hanging onto, and stinging into immobility somewhat large arthropods. Still, based on these observations, the usual prey may include small centipedes or symphylans, but further examination of nests needs to be done to determine what *Prionopelta* feeds upon.

Additional material examined (56 specimens). **COLOMBIA:** Meta: Transecto Sumapaz, 3.8666667 - 74.416664, 1120m, 09.viii.1981, T. van der Hammen col., SUM29, CASENT0260467 (1 worker) [PSWC]. **COSTA RICA:** Alajuela: 6km E. Monteverde, 10.29897 -84.74932 ±50m, 980m, 18.v.2014, J. Longino col., #8693-s, ex. sifted leaf litter, wet forest, CASENT0635127 (1 worker) [DZUP]; CASENT0635130 (1 queen) [JTLC]; same data, 10°18'N 84°45'W, 950m, 22.viii.1985, #861-s, LACM ENT 142643 (1 worker, 1 queen) [JTLC]; same data, Rio Peñas Blancas, 10.3167 -84.7167, 800m, 26.iv.1987, J. Longino col., JTL1578, CASENT0039774 (1 worker) [JTLC]. Limón: Cerro Plátano, 9.87132 -83.23955 ±10m, 1020m, 16.vi.2015, ADMAC, #Wa-E-03-1-36, ex. sifted leaf litter, cloud forest, CASENT0636747 (1 worker) [DZUP]; CASENT0636750 (1 queen) [JTLC]. Res. Biol. Hito-Cerere, 9.65238 -83.02206 ±25m, 530m, 11.vi.2015, ADMAC, #Wm-E-02-1-03, ex. sifted leaf litter, tropical rainforest, CASENT0632088 (1 queen) [DZUP]; same data, 670m, #Wm-E-02-1-06, CASENT0632089 (1 worker) [JTLC]. Puntarenas: 10km SW Pto. Jimenez, 8.46553 -83.36928 ±30m, 240m, 12.iii.2008, J. Longino col., #6197-s, CASENT0601692 (1 worker) [JTLC]. **GUATEMALA:** El Petén: Cerro Cahul, 17.00056°N 89.71992°W, 330m, 24.v.2009, J. Longino col., #6683.1, moist forest, ex. dead wood, CASENT0611043 (1 worker) [JTLC]. Izabal: 16km ESE Morales, 15.41109°N 88.71184°W±28m, 440m, 19.v.2009, LLAMA, #Wm-B-04-2-03, ex. sifted leaf litter, 2° lowland rainforest, CASENT0611474 (1 worker) [DZUP]; CASENT0611473 (1 queen) [JTLC]. **GUYANA:** Mt. Ayanganna Base Camp, 5.33438 -59.92477, 732m, 09.x.2002, J.S. LaPolla col., JSL021009-03-LS01, litter sample, forest, USNMENT00418417 (1 worker) [USNM]. **HONDURAS:** Atlántida: 8km SSW Tela, 15.70961 -87.46828 ±20m, 360m, 17.vi.2010, LLAMA, #Wm-C-08-2-07, ex. sifted leaf litter, tropical rainforest, CASENT0618691 (1 worker) [JTLC]; same data, 7km SSW Tela, 15.724667 -87.451935, 190m, 15.vi.2010, #Wa-C-08-2-14, Mini-Winkler, CASENT0618342 (1 queen) [JTLC]. Comayagua: PN Cerro Azul Meambar, 14.87160 -87.90324 ±50km, 880m, 21.v.2010, B. Boudinot col., BEB0198, montain rainforest clearing in rotting wood or in soil, CASENT0615797 (1 worker) [JTLC]; CASENT0615793 (1 male) [JTLC]; same data, 14.87125 -87.90018 ±20m, 1120m, 20.v.2010, LLAMA, #Wa-C-04-1-06, ex. sifted leaf litter, ridgeline cloud forest, CASENT0615245 (1 queen) [JTLC]. **MEXICO:** Chiapas: 2.8km SE Custepéc, 15°43'N 92°56'W, 1840m, 18.vii.2007, R.S. Anderson col., #2007-022, CASENT0602079 (1 worker) [JTLC]. Laguna Metzabok, 17°08'N 91°38'W, 600m, 14.vii.2007, J. Luna-Cozar col., JTLC000009920 (1 queen) [DZUP]; JTLC000009933 (1 worker) [JTLC]. 12mi NW Ocozo-coautla, 3200ft, 04-05.ix.1973, A. Newton col., hojarasca, madera podrida, CASENT0810430 (1 worker) [MZSA]. 9km SE Santo de Agua, 17°31'N 92°18'W, 50m, 14.vii.2007, R.S. Anderson col., #2007-011, CASENT0602008 (1 worker) [DZUP]; CASENT0601990 (1 queen) [JTLC]. Nayarit: Isla María Madre, 22.vi.1948, M. Cardenas col., #1712, 9076 (9 workers) [MZSP]; same data, 23.vi.1948 (4 workers) [MZSP]. Oaxaca: Uluapan, 4km NE Ayautla, 18.06018 -96.64484 ±200m, 440m, 09.vi.2016, ADMAC, #Wm-F-03-1-03, ex. sifted leaf litter, lowland rainforest, CASENT0640598 (1 queen) [DZUP]; CASENT0640607 (1 worker) [JTLC]. Veracruz: Est. Biol. Los Tuxtlas, 18.58704 -95.07627 ±30m, 170m, 31.v.2016, ADMAC, #Ba-F-01-2-04-09, CASENT0640202 (1 worker)

[J TLC]; same data, 18.58625 -95.07665 ±20m, 180m, 29.v.2016, #Wa-F-01-2-18, ex. sifted leaf litter, tropical rainforest, CASENT0640340 (1 queen) [J TLC]. Los Tuxtlas, 10km NW Sontecomapan, 18.58333 -95.08333, 200m, 20.iii.1985, P.S. Ward col., PSW07333-11, rainforest, sifted litter (leaf mold, rotten wood), CASENT0260466 (2 workers) [PSWC]. Sierra Taviscocla above Cuichapa, 04.viii.1965, W.L. Brown col., (9 workers) [MZSP]. **NICARAGUA: Jinotega:** Parque Nac. Saslaya, 13.76836 -85.02344 ±50m, 1060m, 14.v.2011, J. Longino col., #JTL7556, montane wet forest, under rotten wood, CASENT0619506 (1 worker) [J TLC]. **Matagalpa:** RN Cerro Musún, 12.96817 -85.23301 ±20m, 1060m, 02.v.2011, LLAMA, #Wm-D-01-1-07, ex. sifted leaf litter, montane wet forest, CASENT0624190 (1 worker) [J TLC].

Prionopelta punctulata Mayr, 1866

Figures 29–33, 35D

Prionopelta punctulata Mayr, 1866: 505. Holotype queen: BRAZIL: Paraná [NHMW] (examined by images).

=*Prionopelta mayri* Forel, 1909: 239. Holotype worker: BRAZIL, Santa Catarina, Hecko, CASENT0915650 [NHMW]. Synonymy by Brown, 1960:178.

=*Prionopelta bruchi* Santschi, 1923: 245. Syntype workers: ARGENTINA, Cordoba, Alta Gracia, C. Bruch 1922 (2 specimens examined) [NHMB]. Synonymy by Brown, 1960:178.

Diagnosis. Lateral portion of frons shallowly sculptured. Clypeus strongly projected medially. Eleven antennomeres. Margins of subpetiolar process apically convergent.

Worker measurements (n=8). HL 0.46–0.52; HW 0.40–0.44; SL 0.22–0.27; WL 0.54 –0.60; PrL 0.22–0.24; PrW 0.20–0.30; PetNL 0.12–0.16; PetW 0.22–0.26; PetH 0.14–0.19; PetL 0.14–0.20; T1L 0.18–0.26; T1W 0.30–0.38; TL 1.32–1.56; CI 80–91; SI 50–62; PetI 150–208; PetHI 87–112; PetWI 120–157.

Queen measurements (n=3). HL 0.52–0.58; HW 0.48–0.50; SL 0.24–0.30; WL 0.79–0.87; PrL 0.13–0.21; PrW 0.32–0.34; PetNL 0.15–0.20; PetW 0.24–0.30; PetH 0.21–0.23; PetL 0.18–0.20; T1L 0.28–0.33; T1W 0.41–0.46; TL 1.83–1.91; CI 85–92; SI 48–62; PetI 150–173; PetHI 110–127; PetWI 120–166.

Male measurements (n=3). HL 0.46–0.54; HW 0.52–0.58; SL 0.08–0.13; WL 0.80–0.90; PrL 0.06–0.10; PrW 0.17–0.19; PetNL 0.14–0.19; PetW 0.24–0.26; PetH 0.14–0.20; PetL 0.14–0.28; T1L 0.23–27; T1W 0.38–0.45; TL 1.67–1.99; CI 96–117; SI 14–23; PetI 136–178; PetHI 71–118; PetWI 93–171.

Worker description. Body pale yellow, matte or shiny. Integument covered by sparse punctulate sculpturing; head dorsum with space between the punctures one or two puncture diameters.

Head longer than broad; length of median tooth of mandible shorter than basal tooth; basal margin of mandible convex. Clypeus slightly projecting medially. Eleven antennomeres; antennomeres 1–4 separated by shallow constrictions. Eye placed at the head midlength.

Pronotum almost as long as broad. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to one spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to two spiracular diameters.

Petiolar node as long as high. Subpetiolar process subtriangular or falciform, with its anterior and posterior margin converging apically; posterior margin concave; posteroventral angle mainly obtuse or acute.

Queen. Like workers, with the expected morphology of *Prionopelta* queens.

Male. Anterior clypeal margin projecting medially; head dorsum with dense punctulate sculpture, opaque. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to one spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to almost two spiracular diameters.

Etymology. Although not specified in the original description, the name probably refers to the punctulate body sculpturing.

Distribution (Fig. 35D). *Prionopelta punctulata* is known from northern Brazil to northwestern Argentina.

Comments. The species is easily distinguished from other Neotropical *Prionopelta* by its diagnostic characteristics. Prior to this study, *Prionopelta punctulata* was the only Neotropical species of the genus with 11 antennomeres. Here, we described two new species with the same antennal count. *Prionopelta punctulata* can be easily separated from *P. menininha* and *P. tapatia* by the very marked medial projection of the anterior clypeal margin, the finer sculpture of the head dorsum, and the margins of the subpetiolar process converging apically.

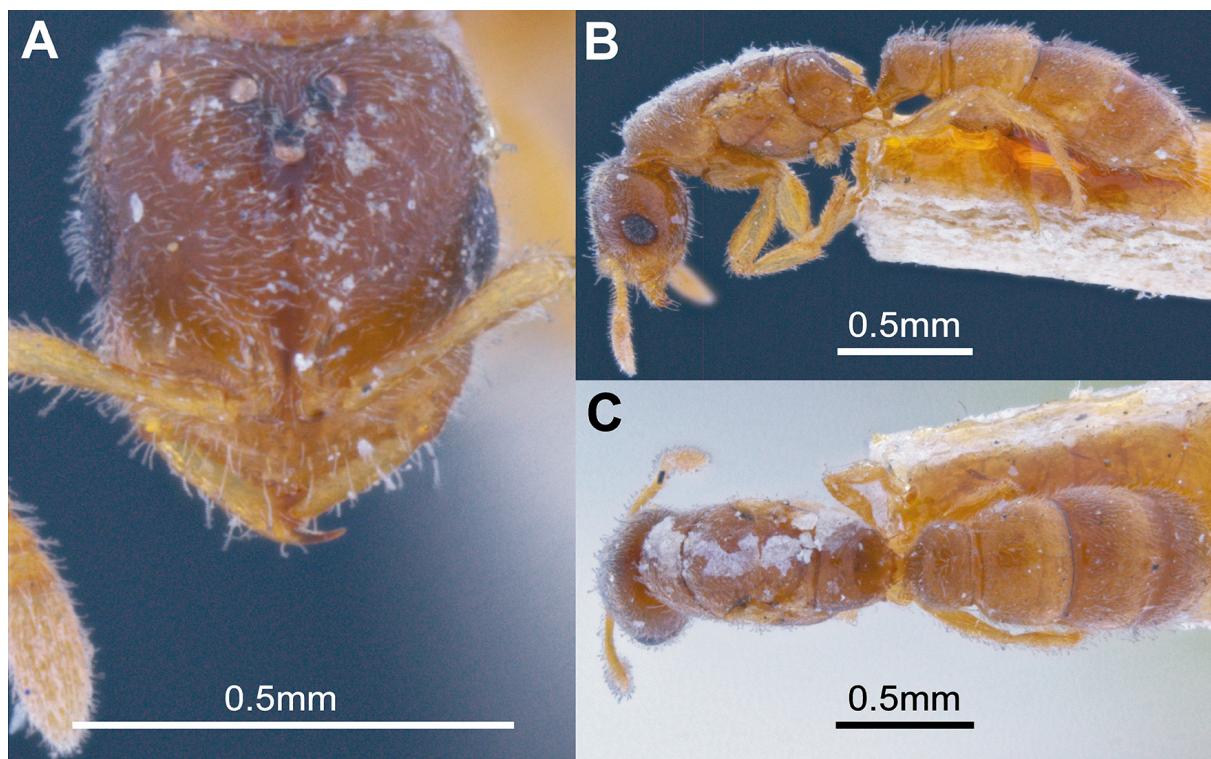


FIGURE 29. Holotype queen of *Prionopelta punctulata* (Brazil, Paraná). A. Full-face view; B. Lateral view; C. Dorsal view. Modified from images taken by Dominique Zimmermann, NHMW.

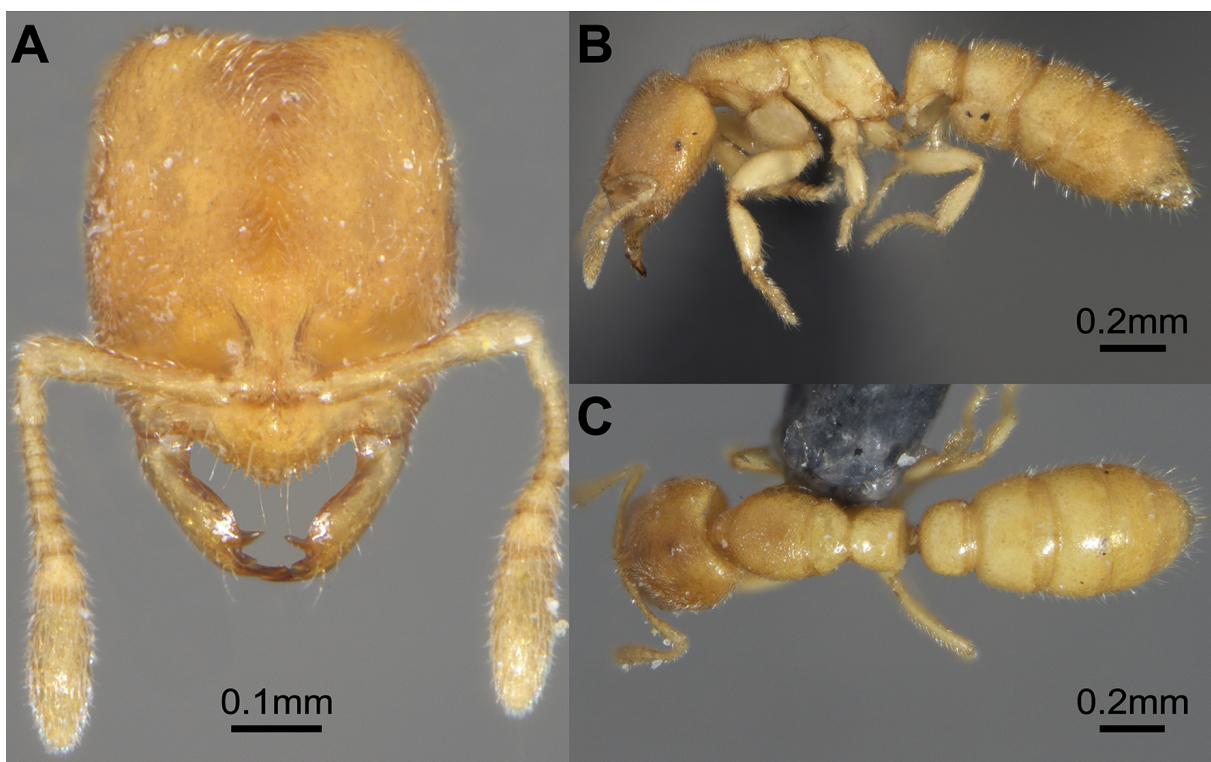


FIGURE 30. Worker of *Prionopelta punctulata* (Brazil, Amazonas). A. Full-face view; B. Lateral view; C. Dorsal view.

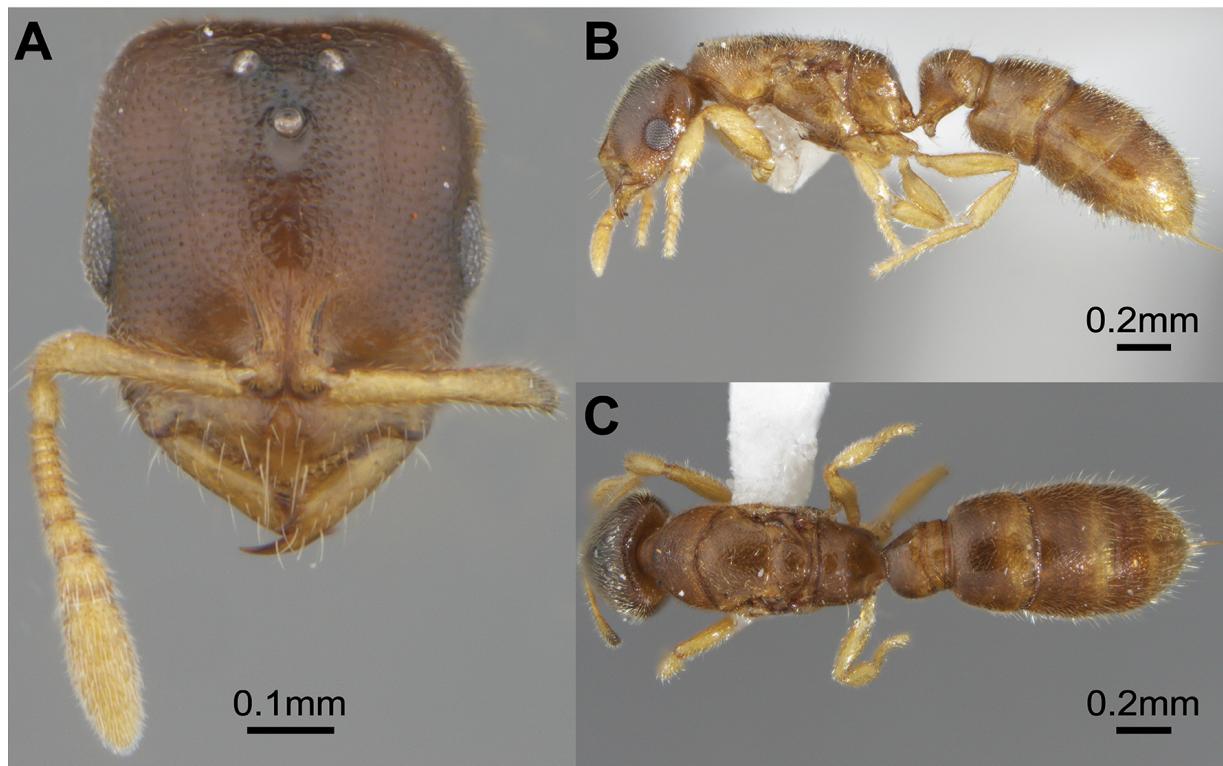


FIGURE 31. Queen of *Prionopelta punctulata* (Brazil, Goiás). A. Full-face view; B. Lateral view; C. Dorsal view.

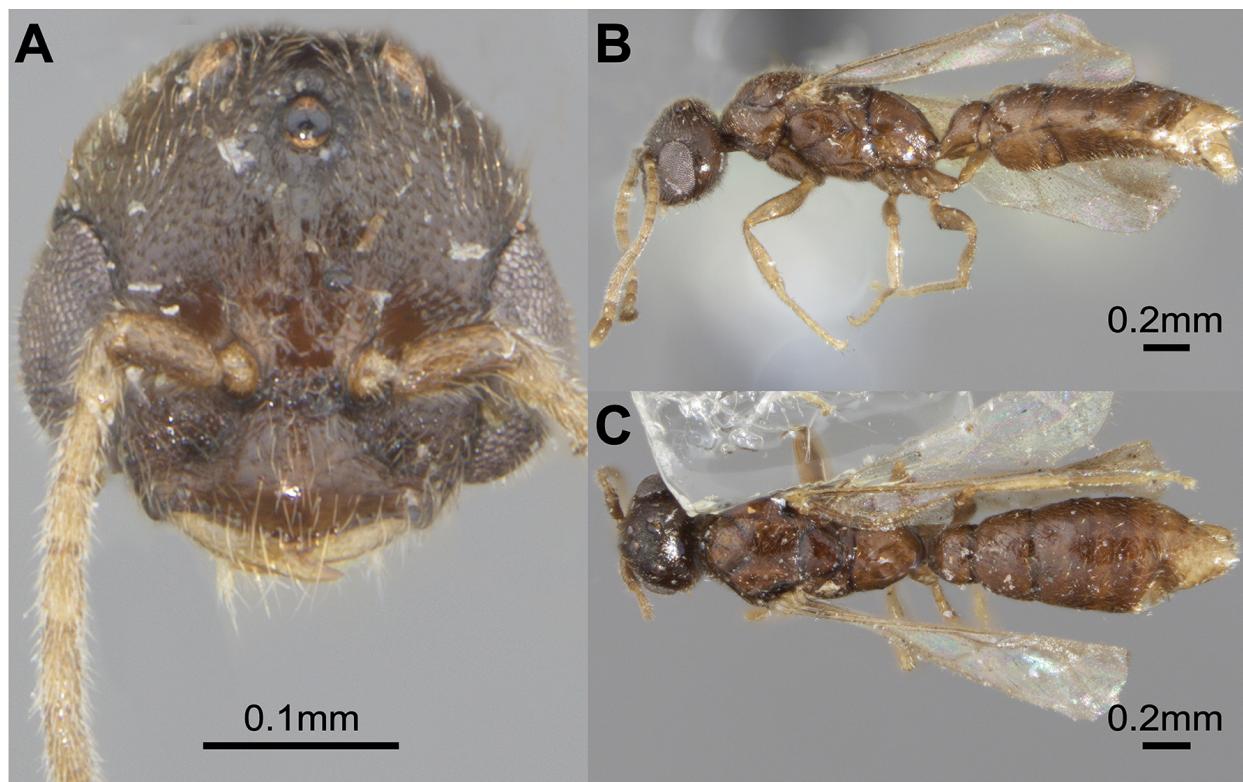


FIGURE 32. Male of *Prionopelta punctulata* (Argentina, Tucumán). A. Full-face view; B. Lateral view; C. Dorsal view.

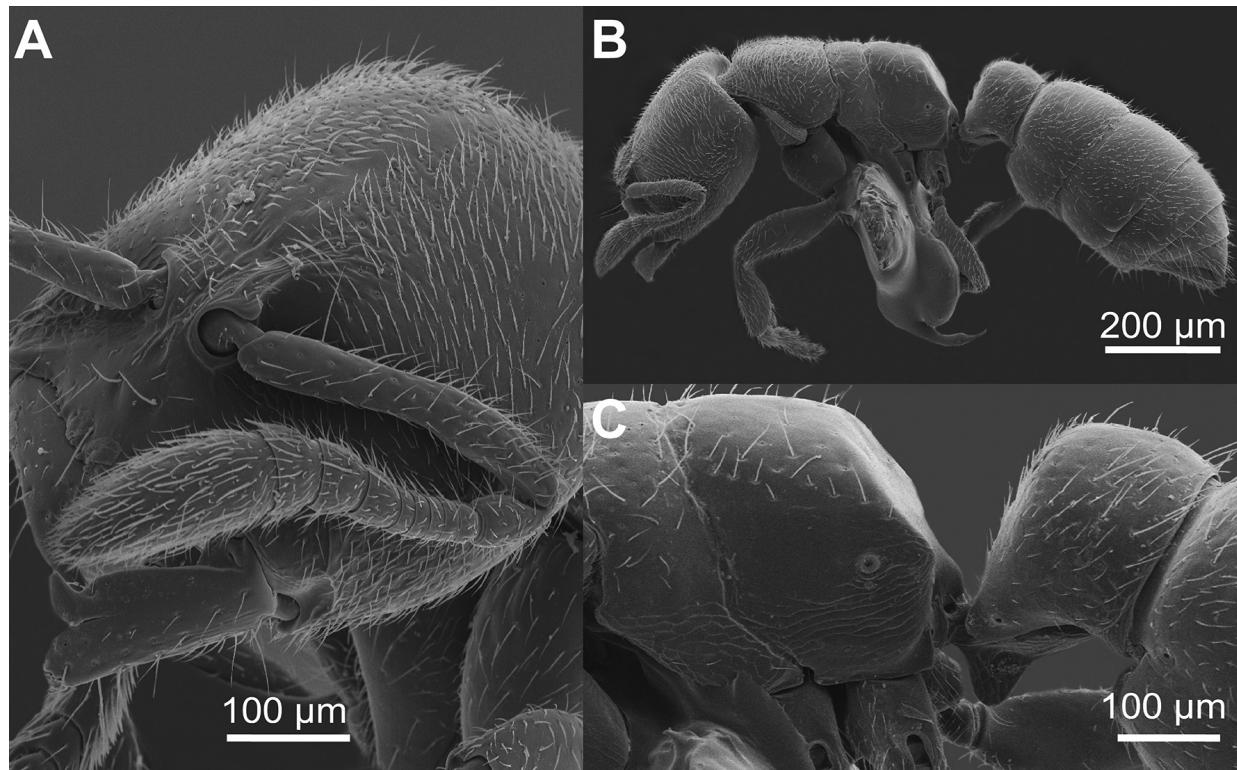


FIGURE 33. Worker of *Prionopelta punctulata* (Brazil, Goiás). A. Head dorsum, note the number of antennomeres and shape of clypeus, B. Habitus, C. Detail of subpetiolar process.

The description of the genus is based on the characteristics of the queen, collected in southern Brazil (Paraná) and described by Mayr (1866) as *P. punctulata* (Fig. 29). The first worker was found in Santa Catarina, and after its description, the specimen was associated with the *P. punctulata* queen by Mayr (1887). Forel (1909) considered the worker to be a distinct species, which he named *Prionopelta mayri*. *Prionopelta bruchi*, from Argentina, was subsequently described by Santschi (1923). Brown (1960) synonymized these last two names under *P. punctulata* arguing that the differences between them were negligible, probably due to a different viewing angle, interpretation, and allometric variation. We concur with Brown's synonymy. The distribution of *Prionopelta punctulata* is mostly centered in southern Brazil and northwestern Argentina. However, there are a few isolated records in the Brazilian central state of Goiás, in Bahia and Piauí in the northeast (Jory & Feitosa, 2020). However, the most peculiar record for the species is from the Central Amazon, in northern Brazil. Despite these isolated records, the specimens from all series can be perfectly recognized as *P. punctulata*.

Natural history. Little is known of its biology. The species is mainly known from litter samples collected in tropical forests; reported at elevations of 170–876m.

Additional material examined (286 specimens). **ARGENTINA:** **Misiones:** Iguassu, 25°42'16"S, 54°21'17"W, 22-24.ix.1996, RBINS Leponce col., T2.17, leaf 24h, (1 worker) [CEPEC]. **Tucumán:** N. Kusnezov col., ML10070, *Prionopelta bruchi* (1 queen, 2 males) [MZSP]; same data, -26.824144 -65.2226, ANTC4710, CASENT0102503 (1 queen) [MHNG]; same data, ANTC6537, CASENT0172312 (1 queen) [ANIC]; same data, 170m, ANTC6538, CASENT0172313 (1 male) [ANIC]; Sammiung, Fritz Schneider, Wadenswil, 1997 (3 males) [NHMB]; (1 male) [DZUP]. **Santiago del Estero:** Loreto, Mis. Dr. Ogloblin, *Prionopelta bruchi* (1 worker) [MZSP]. **BRAZIL: Amazonas:** PDBFF, Cidade Powell, 02°38'69"S 59°87'49"W, 20.viii.2016, Fernandes I.O. leg., coleta manual de solo (6 workers) [INPA]; (18 workers) [DZUP]. **Bahia:** Sambaiba, 11.i.1996, Nascimento I. (1 worker) [MZSP]; same data (3 workers) [CEPEC]; (1 worker) [DZUP]; same data, Mata Atlântica, 11°12'11"S 38°03'0.5"W, i.1996, Nascimento I. col. (1 queen) [UFGD]. **Goiás:** Jataí, Faz. Ariranha, 17°57'40"S 51°51'24"W, 802m, 05.ii.2009, G.G. Santos col., Mini-Winkler (2 workers) [DZUP]. Faz. Lageado 17°49'51"S 51°31'21"W, 856m, 19.ii.2009 (1 worker) [DZUP]. Faz. Leão, 17°48'23"S 51°41'45"W, 855m, 08.ii.2009, G.G. Santos col., Mini-Winkler (2 workers) [DZUP]; same data, 17°48'24"S 51°41'41"W, 861m, 21.ii.2009 (6 workers) [DZUP]. Faz. Rio Paraíso, 17°44'6"S 51°34'30"W, 08.xi.2011, Diniz col., Winkler, A3: cerrado, s. stricto (37 workers) [DZUP]; (2 workers) [MZSP].

Faz. Sertãozinho, 17°55'10"S 51°45'32.7"W, 657m, 05.ii.2009, G.G. Santos col., Mini-Winkler (21 workers, 1 queen) [DZUP]. Faz. Sta. Gertrudes, 17°50'10"S 51°43'09"W, 815m, 01.ii.2009, G.G. Santos col., Mini-Winkler (20 workers, 2 queens) [DZUP]; (1 worker) [MZSP]. Faz. Bonito, 18°24'15"S 52°03'19"W, 687m, 12.iv.2009, G.G. Santos col., Mini-Winkler, *S. officinarum* (33 workers) [DZUP]; (8 workers) [INPA]; (1 worker) [NHMB]. Faz. Perdiz, 18°24'16"S 52°03'20"W, 687m, 12.iv.2009, G.G. Santos col., Mini-Winkler (7 workers) [DZUP]. **Mato Grosso do Sul:** Alcinópolis, P.N.M. Templo dos Pilares, Gruta da Lagoa, 18°08'56.7"S 53°40'43.5"W, 625m, 02-04.xi.2018, Silvestre R. et al. cols., Winkler (1 worker) [UFGD]. Corumbá, 18°58'45"S 56°38'33"W, 13-14.i.2016, Reis Filho W. et al. cols., Winkler (4 workers) [DZUP]. Faz. Nhumirim, 18-20.vii.2016, Reis Filho W. et al., cols. pitfall (2 workers) [DZUP]; same data, 13-14.i.2016 (3 workers) [DZUP]. Porto Murtinho, Chaco Florestado, Faz. Patolá, 21°42'0.29"S 57°43'7.73"W, 07.iii.2012, P.R. Souza & N. Rodrigues cols. (1 worker) [UFGD]. **Minas Gerais:** Uberlândia, Reserva Ecologica Panga, 19°10.840S 48°23.952W, 10.ix.2014, Formigas do Brasil cols., pitfall (1 worker) [DZUP]; same data, 19°10'02"S 48°23'37"W, 01.x.2002, Cauê T. Lopes col. (1 worker) [UFGD]. **Piauí:** Caracol, P.N. da Serra das Confusões, AntPeldT3 705m, 9°13'20.86"S 43°28'3.11W, 03-07.iii.2016, R.M. Feitosa, G.P. Camacho & M.F.O. Martins cols. (1 worker) [DZUP]. Cel. José Dias, P. N. da Serra da Capivara, AntPeldAltoT1, 8°44'30.02"S 42°31'2.58"W 590m, 08-12.iii.2016 R.M. Feitosa, G.P. Camacho & M.F.O. Martins cols. (1 worker) [DZUP]; same data, AntPeldAltoT2 (1 worker) [DZUP]. **Santa Catarina:** Blumenau, Reinchersperger leg. (3 workers) [NHMB]. Lauro Muller, Sul, xii.2011-i..2012, 670456.00 (UTM long) 6859772.00 (UTM lat), M.L.C. Bartz et al. cols. (2 workers) [DZUP]; TSBF IT503 (2 workers) [DZUP]; pit-fall IP501 (1 worker) [DZUP]. **São Paulo:** Agudos, 16.i.1955, W. Kempf col., (1 worker) [MZSP]; same data, 02.xi.1953, #948 (6 workers, 2 males) [MZSP]; same data, 26.xi.1955, #1472 (3 workers) [MZSP]; same data, 23.xi.1955 (4 workers) [MZSP]; same data, 10.i.1956 (1 worker) [MZSP]; same data, 30.i.1955, #1359 (2 workers) [MZSP]; same data, 21.xi.1955, #1463 (1 worker) [MZSP]; same data, 06.iii.1955, C. Gilbert col., #1392 (1 queen) [MZSP]; same data, vii.1959, C. Gilbert col., #3079 (1 worker) [MZSP]; same data, xi.1959, #3216 (1 worker) [MZSP]. Juquitiba, 30.x.1960, W. Kempf col., #3622 (6 workers) [MZSP]. Mirassol, 13.x.1971, J. Diniz col., #364, 10793 (1 worker) [MZSP]; same data, 09.ii.1972, #439, 10795 (6 workers) [MZSP]; same data, 1972, #470, 1105 (3 workers) [MZSP]; same data, Faz. B. Grande, 25.i.1975, #733, sob tronco podre (4 workers) [DZUP]; same data, Groto Parque, 23.ii.1977, #1350, em tronco (2 workers) [DZUP]. Monte Aprazível, Fazenda Bacurí, 27.ii.1974, J. Diniz, #697 (2 workers) [DZUP]; (2 workers) [MZSP]; same data, Rio São José dos Dourados, 11.ii.1976, Diniz, #926, sob tronco podre (3 workers) [DZUP]; (3 workers) [MZSP]. Parelheiro, 28.xii.1962, W.W Kempf, #5293 (1 worker) [MZSP]. **Tocantins:** Porto Nacional, Fazenda Alto Paraíso, 10°43'32"S 48°28'05"W, 05-06.x.2001, Albuquerque & Silva cols., Winkler (3 workers) [DZUP]; (6 workers) [MZSP]. **PARAGUAY: Canindeyú:** Salto del Guaira, -24.0625 -54.306946, 30.x.1979, F. Baud col., ANTC4712, CASENT0102586 (3 workers) [MHNG]; same data, CASENT0102505 (3 workers) [MHNG]. Reserva Natural del Bosque Mbaracayú, Jejuimí, -24.133333 -55.533333, 170m, 12.xi.2002, A.L. Wild col., AW1679, humid subtropical tall forest edge, under rotting wood, CASENT0173506 (1 worker, 1 queen, 1 male) [ALWC]; CASENT0173507 (1 queen) [ALWC]; CASENT0173508 (1 male) [ALWC].

Prionopelta tapatia sp. n.

Figures 34, 35D

Holotype worker: MEXICO: Jalisco: Tamazula de Gordiano, Cerro de la Mesa, 9.x.2016, 19°41'21"N 103°15'19"O, 1442m, Hojarasca, M. Vasquez-Bolaños col., DZUP549796 [DZUP].

Paratype worker. same data as holotype, DZUP549797 (head separate, glued to triangle) [DZUP].

Diagnosis. Lateral portion of frons deeply sculptured in full-face view. Eleven antennomeres. Anterior and posterior margins of subpetiolar process subparallel; posteroventral angle of subpetiolar process acute.

Holotype measurements. HL 052; HW 0.43; SL 0.28; WL 0.58; PrL 0.24; PrW 0.28; PetNL 0.16; PetW 0.24; PetH 0.19; PetL 0.17; T1L 0.26; T1W 0.36; TL 1.53; CI 82; SI 65; PetI 150; PetHI 111; PetWI 141.

Worker measurements (n=4). HL 0.51–0.55; HW 0.42–0.47; SL 0.24–0.28; WL 0.52 –0.64; PrL 0.24–0.26; PrW 0.27–0.32; PetNL 0.14–0.16; PetW 0.24–0.26; PetH 0.18–0.19; PetL 0.14–0.18; T1L 0.22–0.26; T1W 0.34–0.36; TL 1.44–1.55; CI 80–88; SI 52–66; PetI 100–171; PetHI 100–135; PetWI 133–171.

Queen measurements (n=1). HL 0.58; HW 0.51; SL 0.31; WL 0.81; PrL 0.13; PrW 0.29; PetNL 0.14; PetW 0.25; PetH 0.24; PetL 0.19; T1L 0.27; T1W 0.40; TL 1.85; CI 88; SI 61; PetI 178; PetHI 126; PetWI 131.

Worker description. Body dark yellow. Integument covered by deep and dense punctate sculpturing; space between the punctures of lateral portion of frons corresponding to one or half puncture diameter in full-face view.

Head longer than broad; length of median tooth of mandible shorter than basal tooth; basal margin of mandible straight. Clypeus slightly projecting medially. Eleven antennomeres; antennomeres 1–4 separated by deep constrictions. Eyes placed immediately posterior to the head midlength.

Pronotum slightly broader than long. Distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to one spiracular diameter; distance between the propodeal spiracle and the propodeal dorsum corresponding to two spiracular diameters.

Petiolar node as high as long in lateral view. Subpetiolar process with anterior and posterior margins subparallel or parallel; posterior margin concave; posteroventral angle acute.

Queen. Like workers, with the expected morphology of *Prionopelta* queens.

Male. Unknown.

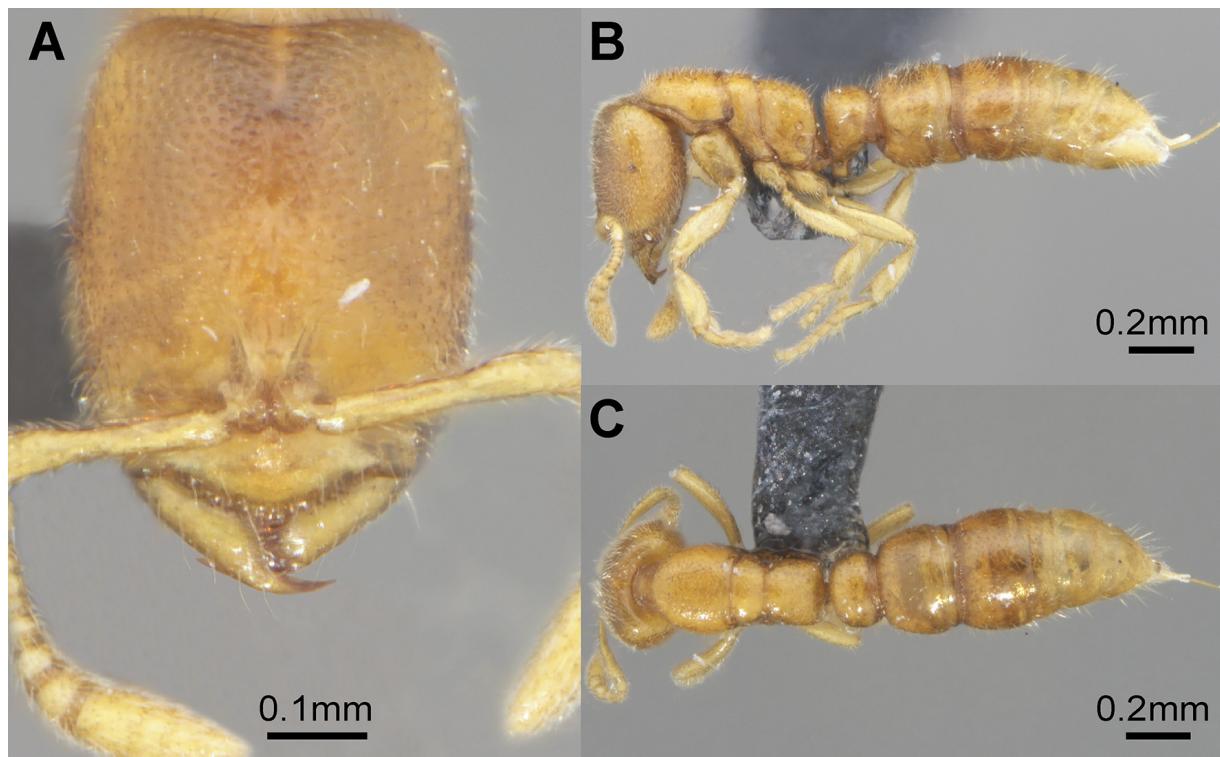


FIGURE 34. Holotype worker of *Prionopelta tapatia* (Mexico, Jalisco). A. Full-face view; B. Lateral view; C. Dorsal view. Specimen: DZUP549796.

Etymology. The name refers to the demonym for those born in the state of Jalisco, Guadalajara, Mexico, from where this species is known. From the Náhuatl term *tapatiotl*. The specific epithet should be considered feminine and indeclinable in accordance to Article 31.2.3 of the International Code of Zoological Nomenclature.

Distribution (Fig. 35D). *Prionopelta tapatia* is only known from western Mexico.

Comments. Among the Neotropical *Prionopelta* with eleven antennomeres, this species is different from *P. punctulata* by the shape of clypeus and the basal margins of mandibles and from *P. menininha* by the presence of a discrete projection of the cuticle in the posteroventral angle of the subpetiolar process. One worker showed ocellar vestiges.

Natural history. The species is mainly known from leaf litter samples collected in disturbed areas, at elevations greater than 900m.

Additional material examined (2 specimens). MEXICO: Jalisco: 3 km N Tequila, 20. 91051 -103.82709, ±50m, 1040m, 28.vi.2017, J. Longino cols., #9859-s, disturbed riparian veg., ex sifted leaf litter, CASENT0644589 (1 worker) [CASC]; 14km SW de Hostotipaquito, 21.012°N 104.179°W, 990m, 4-10.viii.2013, G. Melo & B.B. Rosa cols. (1 queen, without metasoma) [DZUP].

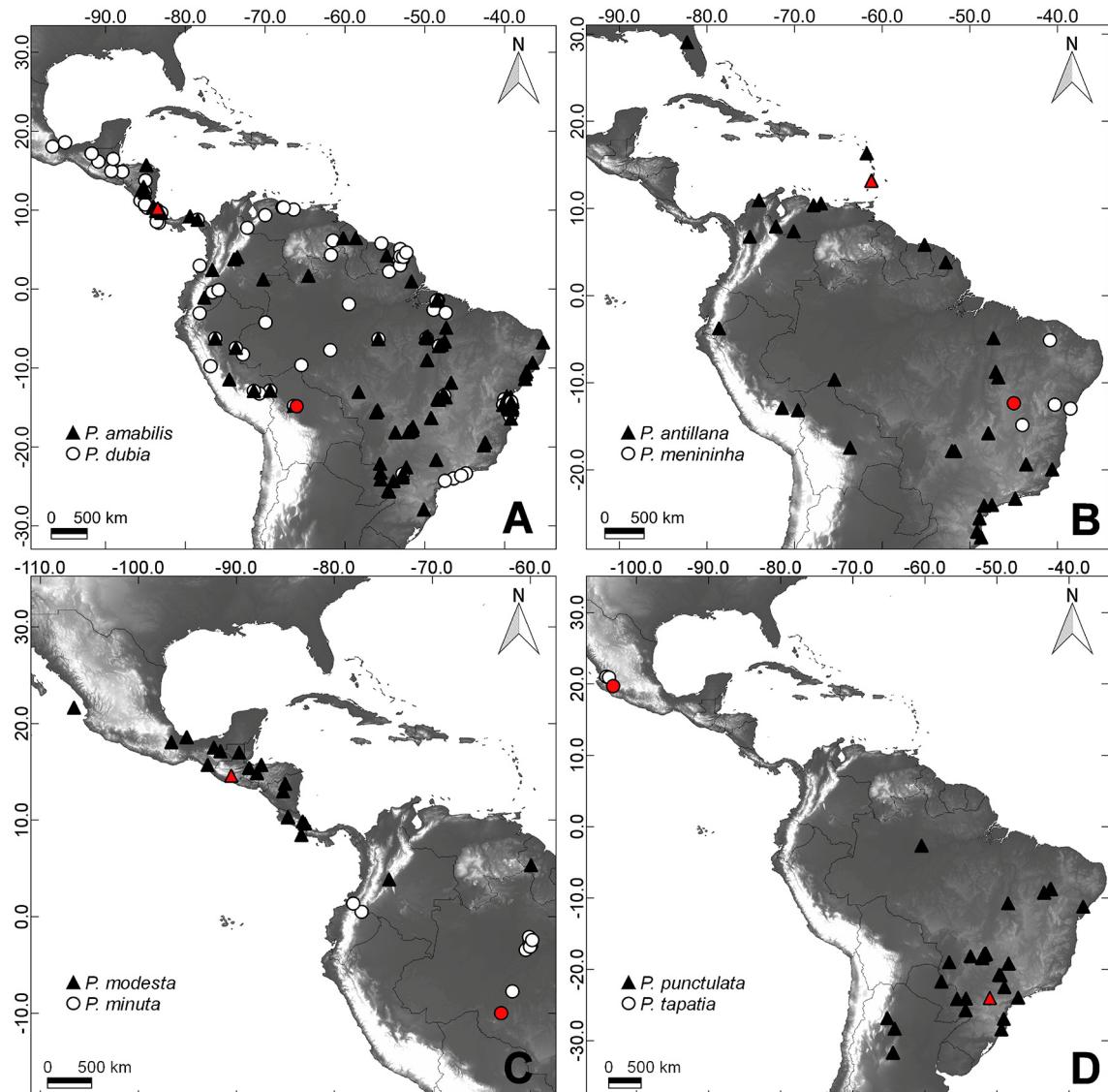


FIGURE 35. Distribution maps for Neotropical *Prionopelta* species. Black triangles indicate already known species, white circles indicate new species described here. Red symbols indicate the type locality of each species.

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