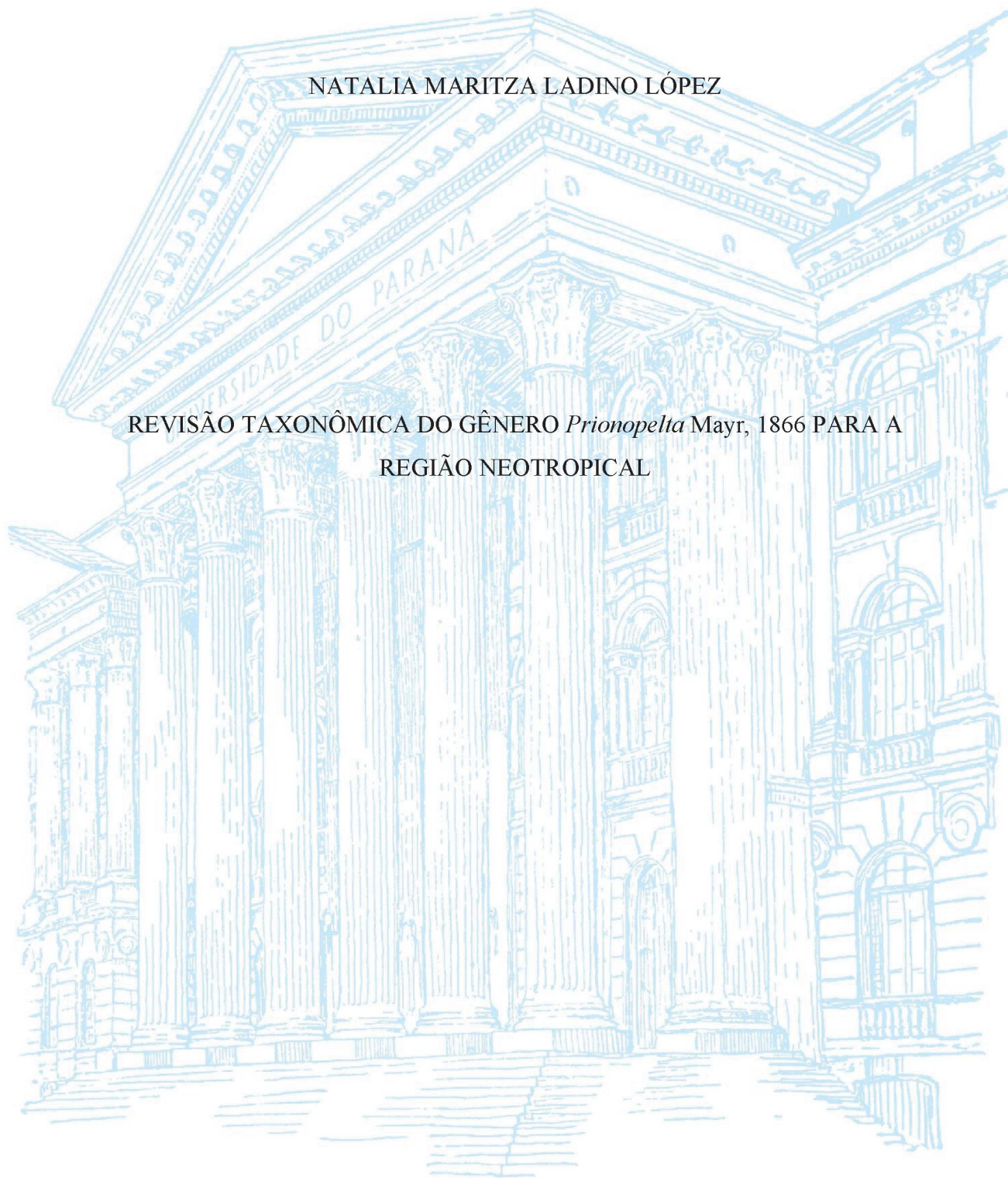


UNIVERSIDADE FEDERAL DO PARANÁ

NATALIA MARITZA LADINO LÓPEZ

REVISÃO TAXONÔMICA DO GÊNERO *Prionopelta* Mayr, 1866 PARA A
REGIÃO NEOTROPICAL



CURITIBA

2019

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REGIÃO NEOTROPICAL

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Orientador: Prof. Dr. Rodrigo M. Feitosa

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Os membros da Banca Examinadora designada pelo Colegiado do Programa de Pós-Graduação em CIÊNCIAS BIOLÓGICAS (ENTOMOLOGIA) da Universidade Federal do Paraná foram convocados para realizar a arguição da dissertação de Mestrado de NATÁLIA MARITZA LADINO LÓPEZ intitulada: Revisão taxonômica do gênero *Prionopelta* Mayr, 1866 para a região Neotropical, após terem inquirido a aluna e realizado a avaliação do trabalho, são de parecer pela sua aprovação no rito de defesa.

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RESUMO

Amblyoponinae é uma subfamília de formigas com distribuição mundial e relações internas incertas. Entre seus gêneros, *Prionopelta* inclui formigas pequenas com hábito criptobiótico e predador, reconhecidas pela presença de uma lamela denticulada na margem anterior do clipeo, mandíbulas tridentadas curtas e adjacentes ao clipeo quando fechadas e uma ampla união do pecíolo com o gáster. *Prionopelta* está representada por 22 espécies válidas no mundo, das quais cinco ocorrem na região Neotropical: *P. amabilis*, *P. antillana*, *P. marthae*, *P. modesta* e *P. punctulata*. Contudo, não existem trabalhos taxonômicos abrangentes para *Prionopelta* nos Neotrópicos. Com base em características morfológicas e dados geográficos de espécimes provenientes de diferentes instituições, apresento a primeira proposta taxonômica abrangente de delimitação das espécies neotropicais do gênero. Oito espécies são reconhecidas neste trabalho, com *P. sp. n. A*, *P. sp. n. B*, e *P. sp. n. C* descritas aqui pela primeira vez. Apresentam-se descrições e redescrições detalhadas da morfologia externa, uma chave de identificação, mapas de distribuição e ilustrações em alta resolução para todas as espécies neotropicais. Conseqüentemente, este trabalho amplia o conhecimento taxonômico do gênero e da subfamília Amblyoponinae na região Neotropical.

Palavras-chave: Amblyoponinae, taxonomia, região Neotropical.

ABSTRACT

Amblyoponinae is an ant subfamily with worldwide distribution and uncertain internal relationships. Among its genera, *Prionopelta* includes small ants with cryptobiotic and predatory habits, recognized by the presence of a denticulate lamella in the anterior margin of clypeus, short tridentate mandibles adjacent to clypeus when closed and a broad union of petiole and gaster. *Prionopelta* is represented by 22 valid species in the world, of which five occur in the Neotropical region: *P. amabilis*, *P. antillana*, *P. marthae*, *P. modesta* and *P. punctulata*. However, no comprehensive taxonomic works have been conducted for *Prionopelta* in the Neotropics. Based on morphological characteristics and geographic data of specimens from different institutions, I present the first comprehensive taxonomic proposal of delimitation of Neotropical species of the genus. Eight species are recognized in this work, with *P.* sp. n. **A**, *P.* sp. n. **B**, e *P.* sp. n. **C** described here for the first time. Detailed descriptions and redescrptions of external morphology, an identification key, distribution maps and high resolution illustrations for all Neotropical species are presented. Consequently, this work expands the taxonomic knowledge of the genus and the subfamily Amblyoponinae in the Neotropical region.

Key-words: Amblyoponinae, taxonomy, Neotropical region.

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1. INTRODUÇÃO GERAL

O interesse em implementar estudos em diferentes escalas na região Neotropical tem sido justificado por vários pesquisadores ao longo do tempo (SCHULTZ, 2005; RULL, 2007). Esta região compreende áreas sob efeito de precipitação e temperaturas médias anuais geralmente elevadas, com uma grande variação em nível regional (KOZAK & WIENS, 2007). De acordo com o que sugerem alguns estudos, estas variações favoreceram a diversificação de espécies na região Neotropical (PENNINGTON et al., 2004; ANTONELLI & SANMARTÍN, 2011; RULL, 2011). A perda de biodiversidade tem promovido a eliminação de processos naturais, valores econômicos e serviços ecossistêmicos nesta região (TUNDISI & MATSUMURA-TUNDISI, 2008). Isso, somado à falta de conhecimento sobre as espécies da fauna e flora locais, torna o panorama mais desalentador, uma vez que se sabe que as medidas de conservação podem ser inadequadas se as espécies locais não são conhecidas (AGNARSSON & KUNTNER, 2007). Neste cenário, vários trabalhos envolvendo diferentes grupos taxonômicos, como as formigas, têm ajudado a entender melhor a importância da região Neotropical para a diversificação das espécies, além de elucidar outros aspectos desconhecidos para a comunidade (FERNÁNDEZ, 2003; NIEVES et al., 2006). Ainda assim, aspectos básicos de taxonomia e história natural das espécies precisam ser melhor estudados.

Formicidae conta com cerca de 13500 espécies descritas, agrupadas em 17 subfamílias e 334 gêneros, dos quais 143 ocorrem na região Neotropical (BOLTON, 2019). Outrora considerada uma tribo pertencente à subfamília Ponerinae (EMERY, 1911; BROWN, 1960; BOLTON, 1995), Amblyoponinae inclui 140 espécies e nove gêneros válidos, sendo que suas relações internas e com outras linhagens poneroides não são muito claras (ESTEVES & FISHER, 2015; WARD & FISHER, 2016). Considerando isso, alguns trabalhos baseados em morfologia e dados moleculares têm sido realizados. Estudos recentes sobre as relações filogenéticas em Amblyoponinae sugerem que existem dois agrupamentos de gêneros: o clado POA, que compreende *Amblyopone*, *Onychomyrmex* e *Prionopelta* e o clado XMMAS, composto por *Adetomyrma*, *Fulakora*, *Myopopone*, *Mystrium*, *Stigmatomma* e *Xymmer* (YOSHIMURA & FISHER, 2012; WARD & FISHER, 2016).

Com distribuição mundial, o gênero *Prionopelta* abriga formigas de pequeno porte, predadoras e habitantes do solo. As operárias apresentam hábitos criptobióticos

com nidificação na serapilheira e madeira em decomposição, razão pela qual têm sido coletadas principalmente nesses substratos por meio da técnica de extrator de Winkler em habitats de floresta, cultivos e áreas semiáridas (ARIAS-PENNA, 2008; ESTEVES & FISHER, 2015).

O gênero foi descrito por Gustav Mayr em 1866 e compreende 22 espécies válidas (BOLTON, 2019). Desde sua descrição, existem poucos estudos dirigidos a revisar sua taxonomia. BROWN (1960) oferece uma compilação detalhada das contribuições científicas ao conhecimento da subfamília em termos de biologia e morfologia, uma sinopse do histórico taxonômico do gênero e a chave mais recente para a identificação das espécies neotropicais de *Prionopelta*; não obstante, pouco amigável. Posteriormente, os estudos de SHATTUCK (2008) e OVERSON & FISHER (2015) revisaram a taxonomia do gênero para Madagascar e a Região Indo-Pacífica respectivamente; no primeiro caso, reconheceram-se seis espécies, sendo duas novas (*Prionopelta media* e *Prionopelta robynmae*) e, no segundo caso, sete espécies, das quais seis representam novos nomes (*Prionopelta laurae*, *Prionopelta seychelles*, *Prionopelta subtilis*, *Prionopelta talos*, *Prionopelta vampira* e *Prionopelta xerosilva*) e uma foi redescrita (*Prionopelta descarpentriesi* Santschi, 1924).

Na região Neotropical existem cinco representantes do gênero: *Prionopelta amabilis* Borgmeier, 1949, *Prionopelta antillana* Forel, 1909, *Prionopelta marthae* Forel, 1909, *Prionopelta modesta* Forel, 1909 e *Prionopelta punctulata* Mayr, 1866, esta última a espécie tipo, por monotipia (BOLTON, 2019). Contudo, não existem trabalhos taxonômicos abrangentes para o gênero na região Neotropical.

Assim, este estudo pretende proporcionar delimitações sólidas a respeito de quantas e quais são as espécies neotropicais de *Prionopelta*, e contribuir ao aumento do conhecimento taxonômico e da história evolutiva de Amblyoponinae na região Neotropical.

2. OBJETIVOS

2.1 OBJETIVO GERAL

- Realizar uma revisão taxonômica das espécies do gênero *Prionopelta* Mayr, 1866 (Formicidae: Amblyoponinae) que ocorrem na região Neotropical.

2.2 OBJETIVOS ESPECÍFICOS

- Produzir uma chave de identificação ilustrada e atualizada para as espécies neotropicais do gênero.
- Prover descrições e redescrições da morfologia externa para todas as castas e espécies reconhecidas.
- Gerar mapas de distribuição para todas as espécies reconhecidas.
- Aumentar a representatividade de espécimes *Prionopelta* na Coleção Entomológica Padre Jesus Santiago Moure (DZUP).

3. RESULTADOS

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 and a species delimitation proposal is presented. Morphological traits combined with geographical data led to the recognition of eight species, three of them described here as new: *Prionopelta* sp. n. **A**, *Prionopelta* sp. n. **B** and *Prionopelta* sp. n. **C**. External morphology descriptions of the worker caste of all species are provided, as well as for some of their males and queens, mostly described here by the first time. An identification key, distribution maps and high-resolution illustrations are supplied for all species.

Key words: Systematics, Morphology, Distribution, Dracula-ants, Amblyoponinae.

Introduction

The ant subfamily Amblyoponinae is considered a group with uncertain internal relationships, particularly referring to the delimitation of its nine genera (Esteves & Fisher 2015). Among them, the widespread genus *Prionopelta* encompasses 22 valid species of monomorphic ants. In the Neotropical region, five species were known to represent the genus: *P. amabilis* Borgmeier, 1949, *P. antillana* Forel, 1909, *P. modesta* Forel 1909 and *P. punctulata* Mayr, 1866, this last one as the genus type-species by monotypy (Bolton 2019).

In contrast with the taxonomic knowledge of the genus in the Indo-Pacific and Malagasy regions (Shattuck 2008; Overson & Fisher 2015), no comprehensive works have been conducted in the Neotropical region. The current key for the identification of the Neotropical species was provided by Brown (1960). However, this key does not include *P. marthae*. Besides, the use of geographic data alone to separate *P. amabilis* and *P. antillana*, two morphologically similar species that occurs in sympatry, has remained as the main taxonomic problem of the genus in this biogeographical region (Esteves & Fisher 2015). A modified version of Brown's key was presented for *Prionopelta* of Colombia in Arias-Penna (2008), although it lacks any solution to the limitations present in the original key.

Except for a few notes on the biology of *P. amabilis* and *P. modesta* (Brown 1960; Hölldobler & Wilson 1986; Hölldobler *et al.* 1992), nothing is known about the natural history of the remaining Neotropical species. Additionally, descriptions of queens and males are uniquely available for *P. punctulata* (Mayr 1866; Forel 1893).

Although *Prionopelta* involves a small species group, they are commonly collected and old questions regarding Neotropical species delimitation have persisted as a confusing issue. In this context, the present paper provides a review of the taxonomy, a species delimitation proposal and an update of the geographical distribution for the Neotropical species of these cryptobiotic ants.

Methods

Approximately 3900 *Prionopelta* specimens known to exist in museum collections were examined in this work. The acronyms presented here follow a modified version of Brandão (2000):

ANIC	Australian National Insect Collection, CSIRO, Canberra, Australia.
BMNH	The Natural History Museum, London, United Kingdom.
CASC	California Academy of Sciences, San Francisco, U.S.A.
CPDC	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.
IMLA	Fundación e Instituto Miguel Lillo, Universidad Nacional de Tucumán, Miguel Lillo 251, Tucumán, Argentina.
INPA	Instituto Nacional de Pesquisas da Amazônia, Manaus, AM, Brazil.
JTLC	Personal collection of John T. Longino at the Department of Biology, University of Utah, Salt Lake City, U.S.A.
MCZC	Museum of Comparative Zoology, Harvard University, Cambridge, 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, U.S.A.
UFGD	Universidade Federal da Grande Dourados, Museu da Biodiversidade, Dourados, MS, Brazil.
UFVB	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, Washington, U.S.A.
ZMUC	Universitetets Zoologiske Museum, Copenhagen, Denmark.

Observations were made with a Leica S8APO stereomicroscope at magnifications up to 80X. Terminology for external morphology follow Bolton (1994), and Boudinot (2015) for the mesosoma of queens and males. Terms for sculpturing, pilosity and wing venation follow Harris (1979), Wilson (1955) and Yoshimura & Fisher (2012), respectively.

High-resolution images were taken at the *Laboratório de Sistemática e Biologia de Formigas, Universidade Federal do Paraná (UFPR)*, with a Zeiss Discovery V20 stereomicroscope with coupled camera AxioCam 305 color and the software Zen 2.3. Images of scanning electron microscopy were obtained at the *Centro de Microscopia Eletrônica (CME)* of the UFPR at magnifications from 10 μm to 500 μm .

Distribution maps were generated with the software Quantum GIS 2.18.18, based on coordinates obtained from label data or georeferenced in Google Earth.

Measurements (presented in mm) were performed using a micrometric reticulum coupled to a stereomicroscope at magnifications up to 100X, and follow Shattuck (2008):

HL	Maximum head length in dorsal view, measured from the anterior-most point of the clypeal margin to the posterior-most point of the head proper.
HW	Maximum head width in dorsal view.
SL	Length of the antennal scape in dorsal view, excluding the basal neck and condyle.
ML	Mesosomal length in lateral view, measured from the anterior surface of the pronotum proper (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.
PetL	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 in lateral view, measured as the perpendicular distance from the dorsal surface of the petiolar node to the ventral margin of it, immediately anterior to the subpetiolar process.
PetL	Maximum length of the petiole in lateral view, measured from the anterodorsal face to the posterior margin of it (excluding the helcium).
T1W	Width of first gastral (third abdominal) tergite in dorsal view.
TL	The total outstretched length of the ant, obtained by the sum of HL, ML, PetL and T1W.

At the "Taxonomic account" section, the species are arranged alphabetically. Remarks on taxonomy and comparative notes are presented in the comments section after each species description when pertinent. A detailed list of the examined material is also provided, organized in the alphabetical order of the corresponding geographical units for each species account.

Taxonomic synopsis

Prionopelta amabilis Borgmeier, 1949. Mexico to Brazil (AC, AM, BA, PA, RO and SP).

P. antillana Forel, 1909 Honduras to Argentina.

P. marthae Forel, 1909 Guadeloupe to Brazil (CE, DF, ES, GO, MA, PR, RO, SC, SP and TO).

P. modesta Forel, 1909 Mexico to Colombia.

P. punctulata Mayr, 1866 Brazil (AM, BA, GO, MA, MG, MS, PR, RO, SC, SP and TO) to Argentina.

= *P. mayri* Forel, 1909 (synonymy by Brown, 1960).

= *P. bruchi* Santschi, 1923 (synonymy by Brown, 1960)

P. sp. n. **A.** Brazil (BA, CE and MG).

P. sp. n. **B.** Mexico.

P. sp. n. **C.** Colombia and Brazil (AM).

Taxonomic account

Prionopelta Mayr, 1866

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

Genus references: 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); Cantone, 2017: 106 (male diagnosis).

Generic diagnosis. Monomorphic amblyoponine ants. Body sculptured, except for the smooth mandibles, antennae, legs and propodeal declivity; integument entirely covered by pubescence, long and short flexuous hairs. Mandibles tridentate, short and adjacent to clypeus when closed. Clypeus convex with a denticulate lamella disposed on its anterior margin. Antennal club 4-segmented. Petiole broadly attached to gaster.

Worker generic description. Small-sized ants (TL 1.33–1.85 mm). Color pale-yellow to light brown. Integument thick, shiny and sculptured on head, mesosoma, petiole and gaster; body with point-like sculpture that vary in depth and density, more distinct in head dorsum, particularly in the malar area; lateral surface of mesosoma with longitudinal

striations extending from the inferior half of the mesopleura to the propodeal spiracles. Body covered by three kinds of pilosity: pubescence, short and long hairs; pubescence smoothly converging to the center/median line of sclerites, more obvious in head dorsum, pronotum and first gastral tergite; long hairs almost of the same size of the two preapical antennomeres together, short hairs almost the total length of the first preapical antennomer; in full-face view, mandibles with short and long hairs; dorsal and ventral surface of the mandibles with at least eight sparse, long and flexible hairs each; clypeus with three rows of hairs inserted at the anterior margin, median portion and posterior margin; anterior margin with two long median hairs, flexible and curved downwards; median portion of clypeus with two long, distinct, flexible hairs directed forwards; posterior margin with a long and distinct hair, flexible and directed forwards; antennae pubescent, scapes with short erect hairs; head dorsum and mesosoma pubescent; pronotum with short, erect and disperse hairs; mesonotum and propodeum with sparse, erect and long hairs; propodeal declivity devoid of any pilosity; petiolar node with some erect and long hairs; subpetiolar process with one or two long hairs curved backwards.

Head as long as or slightly longer than broad in full-face view, lateral margins slightly convex, smoothly converging towards the mandibles; occipital lobes convex; occipital margin weakly concave. Mandibles subtriangular, short and adjacent to clypeus when closed; basal margin convex or straight; masticatory margin tridentate; apical teeth the longest, size proportion between basal and median teeth variable, diastema between the basal and median teeth longer than that between the median and apical ones. Anterolateral margins of clypeus rounded; clypeus medially projected anteriorly or evenly rounded; medial carina discontinuous, not reaching the anterior margin; lamella with denticles slightly directed outwards and apparently arising from its ventral portion. Frontal lobes small, very close to each other, partially covering the antennal insertions. Antennae with 11 or 12 segments; antennal club 4-segmented, with antennomeres separated by shallow or deep constrictions; scapes elongate and uniform until half of its length, then slightly thick and curved at apex; scapes not reaching the posterior margin of head. Compound eyes reduced, set laterally at or immediately posterior to the midheight of head. In ventral view, postgenal suture present and complete, extending towards the posterior margin; median part of the posterior margin strongly incised.

Mesosoma unarmed. In lateral view, dorsal profile evenly convex, interrupted only by the promesonotal suture and the metanotal groove. Pronotum in dorsal view with anterior margin convex, lateral margins slightly converging to the promesonotal suture. In dorsal view, mesonotum trapezoidal; in lateral view, inferior portion of mesopleura at a lower level than the adjacent surface. In dorsal view, posteroinferior corners of propodeum with a pair of tiny acute projections. In profile, spiracles small and directed ventrolaterally. Propodeal declivity slightly inclined posteriorly; ventral surface medially projected in the form of an inconspicuous tubercle. Legs relatively short and robust with tarsal claws small and simple. In lateral view, forelegs with large and rounded coxae; trochanters conspicuous and rounded; femora and tibiae thickened; posterior margin of the basitarsi with a pronounced notch; four basal tarsomeres with a row of small and acute projections on the internal surface. In lateral view, mid- and hindcoxae with a pair of longitudinal carinae on the dorsal surface; femora and tibiae of the midlegs and hindlegs slender than in the forelegs. Tibiae of the hindlegs with a pectinate spur; posterior margin of the basitarsi notched.

Petiole not pedunculated, with petiolar node well developed; in dorsal view, anterior margin with two inferior short spines at each corner; lateral margins rounded. In

profile, spiracles small and rounded; dorsal profile slightly and uniformly convex. Subpetiolar process conspicuous. In lateral view, posteroventral angle of the process mainly obtuse; anterior and posterior margins converging apically or parallel; posterior margin concave or straight; fenestra present. In ventral view, subpetiolar process triangular, with rounded corners; visible part of the helcium rounded. In profile, gaster elongate; prora present as two rounded anterolateral projections. In ventral view, anterior margin of the first gastral segment slightly concave between the projections of the prora. Deep girdling constriction of the second gastral segment present. Sting apparatus well developed.

Queen generic description. Slightly larger than workers (TL 1.78–2.37 mm). Morphologically similar to conspecific workers, with expected modifications of the mesosomal sclerites for ant reproductive females. Alate.

Head in full-face view with compound eyes large, disposed at head's midheight; three well developed ocelli present, similar in size.

In dorsal view, pronotal lobe small. Mesonotum with mesoscutum large and trapezoidal; notauli incomplete when present; parapsidal lines and parascutellar carina present; tegulae and axillae flattened. Mesoscutellar disc at the same level of the mesoscutum; rounded. In lateral view, mesosoma uniformly convex. Oblique mesopleural sulcus and mesopleural pit mainly incomplete and conspicuous, respectively; spiracular sclerite subtriangular. Wings with simple venation. Forewings with a colored stigma, longitudinal veins C, Sc+R, RS, M+Cu and A present, not reaching the apical margin of wing; cells C, R and Cu closed; veins M and Cu extending shortly beyond the adjacent closed cells. Hindwings with longitudinal veins R+RS, M+Cu and A present, not reaching the apical margin; veins R, RS and Cu extending shortly beyond R cell. Four submedian hamuli present.

In profile, petiole and subpetiolar process as in conspecific workers; gaster elongated and robust.

Male generic description. Small to medium-sized (TL 1.66–2.10 mm). Color dark-yellow to brownish-black. Sculpture and pilosity traits similar to those of conspecific workers, with modifications of the mesosomal sclerites and the apex of gaster expected for ant males.

Head rounded. In full-face view, occipital lobes and margin smoothly convex. Mandibles subfalcate; bidentate; apical teeth the longest. Clypeus with anterior margin slightly projected anteriorly or evenly rounded; posterior margin smoothly converging to the frons with its median portion truncate or evenly rounded. Antennae with 13 segments; scapes short. Compound eyes large occupying almost a quarter of head and set shortly after the posterior margin of clypeus and laterally; three well developed ocelli present and similar in size.

In dorsal view, mesosoma and wings similar to conspecific queens, except for the presence of notauli.

In profile, petiolar node with its anterior margin distinctly inclined posteriorly; subpetiolar process with the posterior margin straight. Gaster elongate and slender. Girdling constriction of the second gastral segment present and shallow. In ventral view, apicolateral corners of abdominal sternum IX rounded.

Etymology. Although not specified in the original description, the name may refer to the shape of clypeus and denticulate lamella of its anterior margin. From Greek, *prionos*: saw, and from Latin, *pelta*: shield.

Comments. *Prionopelta* comprises small sized ants that can be distinguished from all other members of Amblyoponinae by its diagnostic characters. Comparatively, the Neotropical species just include ants with 11 or 12 antennal segments (Brown 1960), while some Malagasy species could present nine (Overson & Fisher 2015).

The main taxonomic problem of *Prionopelta* in the Neotropics has been the historical lack of delimitation between the widely distributed, sympatric and morphologically similar species *P. antillana* and *P. amabilis*.

Distribution. Neotropical *Prionopelta* species range from the eastern coast of Mexico to northwestern Argentina. Despite its occurrence in crops and semi-arid areas, the genus has been collected mainly in forest habitats, nesting in leaf litter, fallen logs and under stones, that is why these ants are generally collected through Winkler technique.

Natural history. Little is known about the biology of *Prionopelta*. However, three studies contribute to this knowledge area for the Neotropical species. Brown (1960) considers that the genus shows traits of a cryptobiotic life, including small size, pale color, and elongate mandibles, also presents some notes on *Prionopelta modesta*. Hölldobler & Wilson (1986) and Hölldobler *et al.* (1992) are the first detailed studies exploring natural history aspects on *Prionopelta amabilis*.

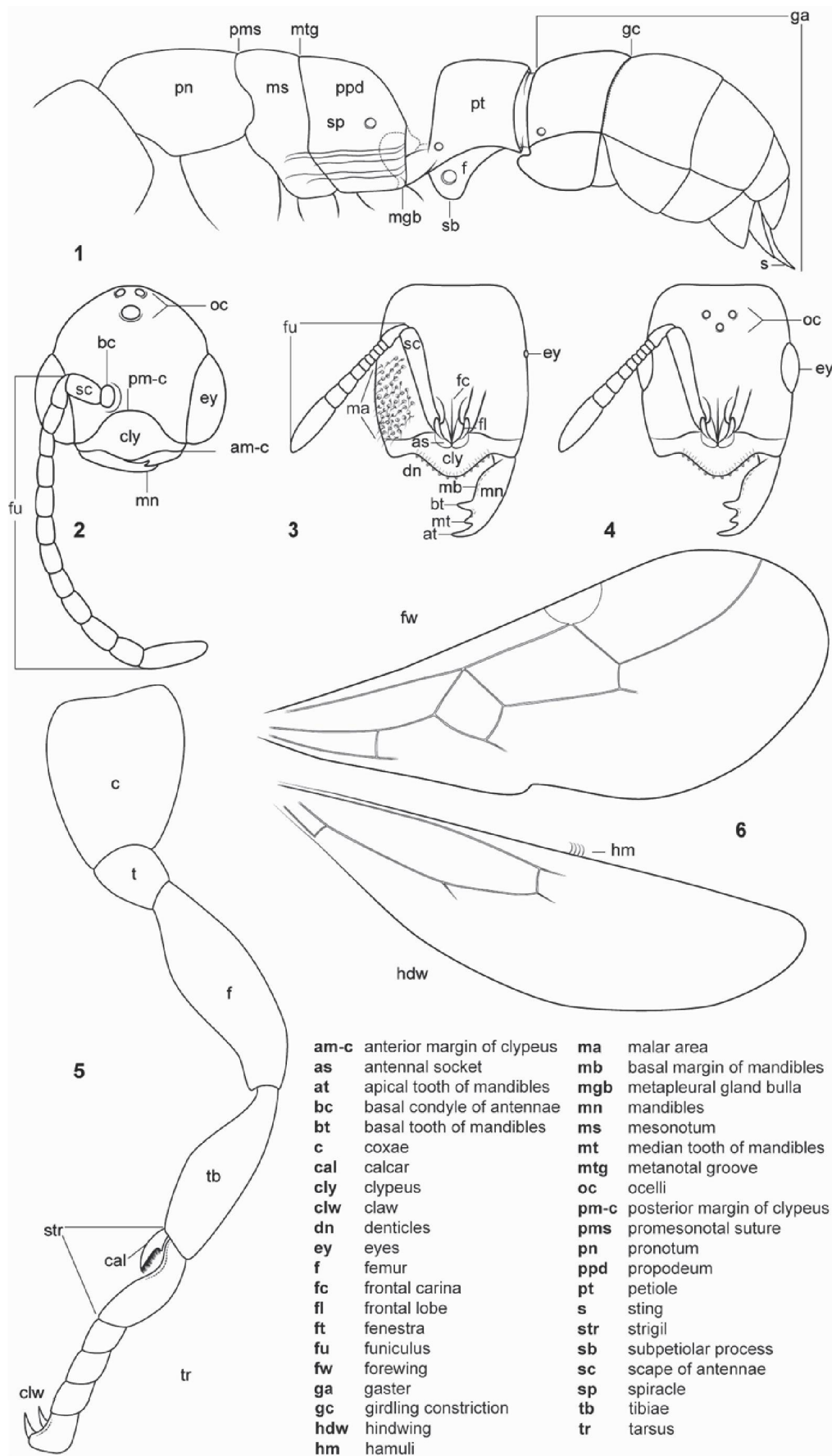
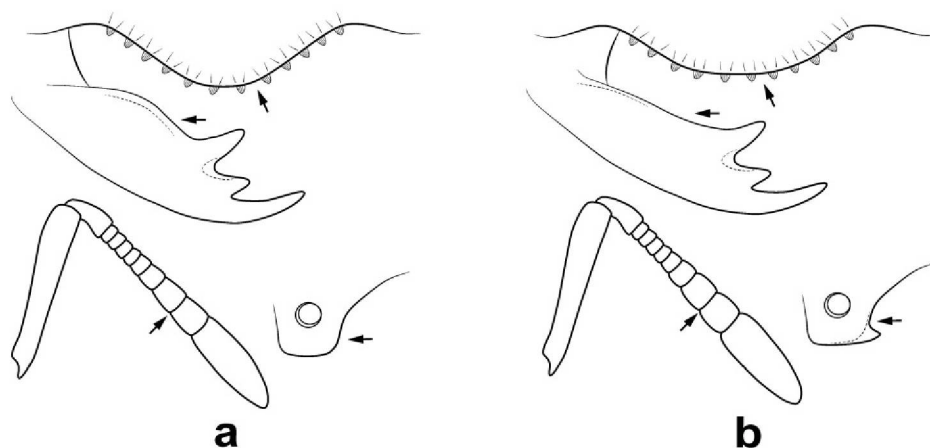


FIGURE 1. Glossary of the external morphology in *Prionopelta*. **1** Habitus (worker); **2-4** Head, **2.** male, **3.** worker, **4.** queen. **5.** Foreleg (worker), **6.** Wings (queen).

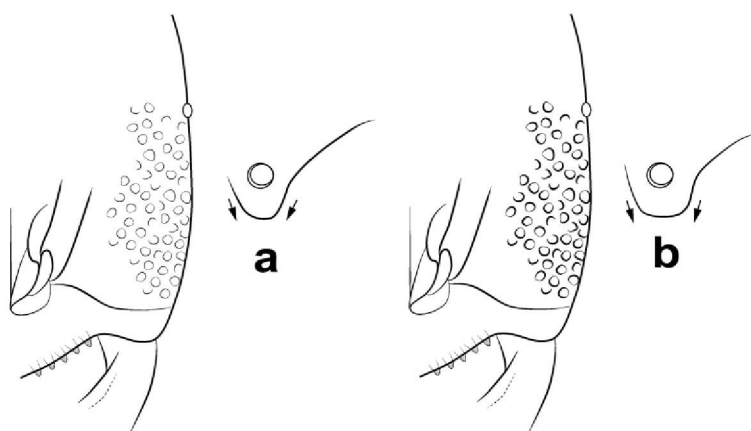
Identification key for the Neotropical species of *Prionopelta* (workers and queens)

- 1a.** Antennae with 11 segments.....2
1b. Antennae with 12 segments.....4

- 2a.** In full-face view, basal margins of mandibles convex; clypeus slightly projected medially. Apical antennomeres separated by shallow constrictions. In lateral view, posteroventral angle of the subpetiolar process obtuse.....3
2b. In full-face view, basal margins of mandibles straight; clypeus evenly rounded anteriorly, without a conspicuous median projection. Apical antennomeres separated by deep constrictions. In lateral view, posteroventral angle of the subpetiolar process acute (Mexico).....*P. sp. n. B*



- 3a.** In full-face view, malar area finely sculptured. In lateral view, subpetiolar process with its anterior and posterior margins converging apically (Brazil and Argentina)*P. punctulata*
3b. In full-face view, malar area deeply sculptured. In lateral view, subpetiolar process with its anterior and posterior margins parallel (Brazil).....*P. sp. n. A*

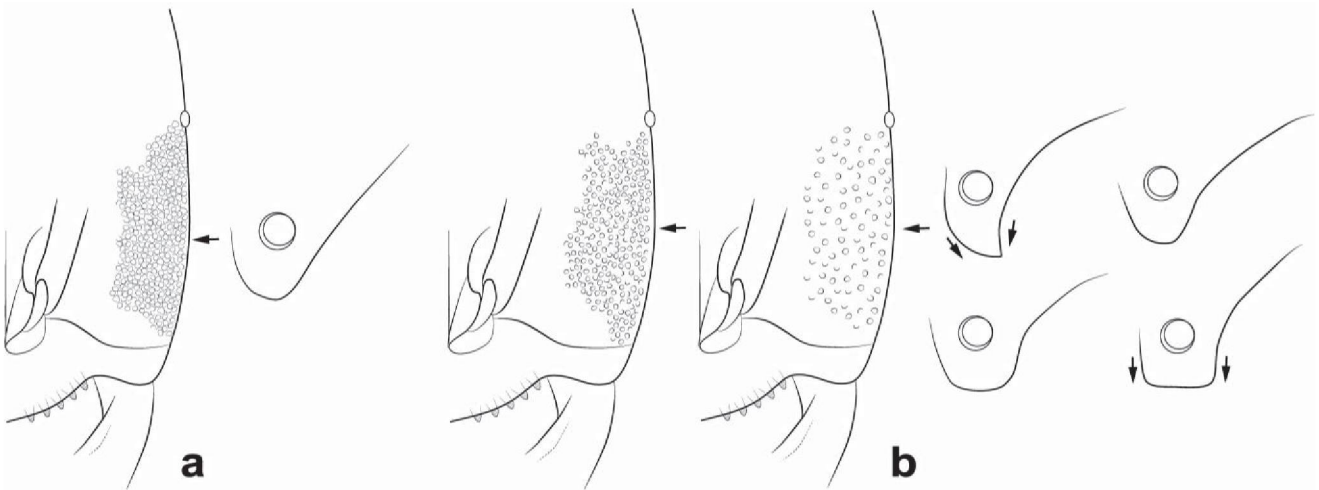


- 4a.** In full-face view, mandibles with basal tooth distinctly larger than the median one.....5
4b. In full-face view, mandibles with basal tooth as large as the median one (Mexico to Brazil).....*P. amabilis*



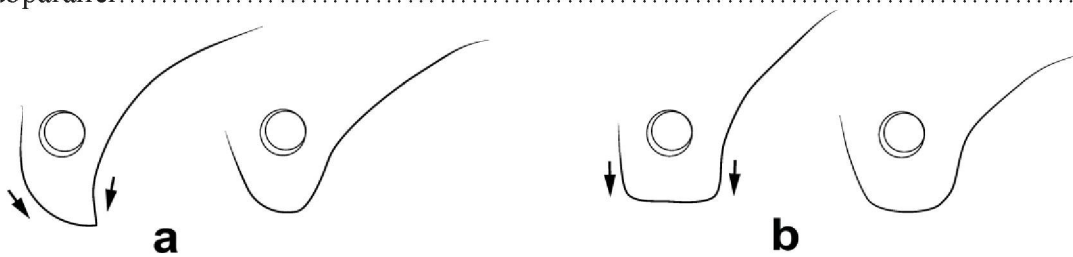
5a. In full-face view, interval between the punctures of malar area inconspicuous. In lateral view, subpetiolar process with its posterior margin straight. TL \leq 1.5 mm. (Colombia and Brazil).....*P. sp. n. C*

5b. In full-face view, interval between the punctures of malar area conspicuous. In lateral view, subpetiolar process with its posterior margin concave. TL $>$ 1.5 mm6



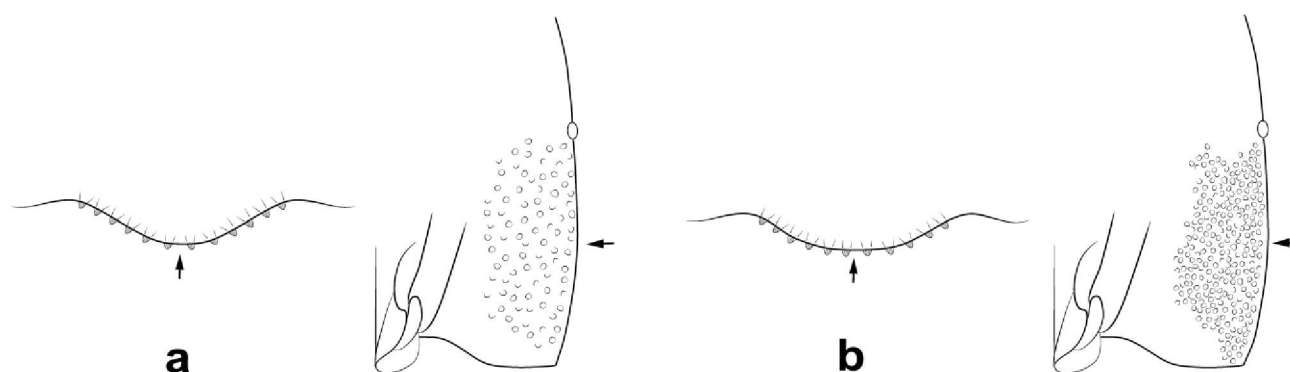
6a. In lateral view, subpetiolar process with its anterior and posterior margins converging apically (Guadeloupe to Brazil).....*P. marthae*

6b. In lateral view, subpetiolar process with its anterior and posterior margins parallel or subparallel.....7



7a. In full-face view, clypeus slightly projected medially; malar area sparsely sculptured (Honduras to Brazil).....*P. antillana*

7b. In full-face view, clypeus evenly rounded; malar area densely sculptured (Mexico to Costa Rica).....*P. modesta*



Identification key for Neotropical *Prionopelta* species (males)

Note: This key includes males of only four out of the eight Neotropical species of *Prionopelta*.

- 1a.** In full-face view, anterior margin of clypeus medially projected.....2
1b. In full-face view, anterior margin of clypeus medially rounded.....3
- 2a.** In full-face view, head dorsum with sparse point-like sculpture, rendering the integument shiny (Honduras, Lesser Antilles to Brazil)*P. antillana*
2b. In full-face view, head dorsum with dense point-like sculpture, rendering the integument opaque (Brazil to Argentina)*P. punctulata*
- 3a.** In full-face view, posterior margin of clypeus medially converging to the frons and truncate at its median portion.....*P. modesta*
3b. In full-face view, posterior margin of clypeus evenly rounded.....*P. amabilis*

Species descriptions

Prionopelta amabilis Borgmeier, 1949

Figures 2–5, 24

Prionopelta amabilis Borgmeier, 1949: 203, figs. 3–5. Holotype worker, Costa Rica: Hamburg Farm, F. Nevermann leg., [MCZC] (examined by images).

Diagnosis. In full-face view, mandibles with basal teeth as large as the median ones; malar area superficially and densely sculptured. Antennae with 12 segments.

Worker measurements (n=22). HL 0.50–0.60; HW 0.40–0.57; SL 0.24–0.34; ML 0.56–0.67; PrL 0.22–0.32; PrW 0.26–0.34; PetNL 0.11–0.17; PetW 0.19–0.27; PetH 0.16–0.20; PetL 0.12–0.18; T1W 0.28–0.40; TL 1.53–1.82.

Queen measurements (n=9). HL 0.60–0.65; HW 0.50–0.54; SL 0.24–0.35; ML 0.82–0.92; PrL 0.10–0.20; PrW 0.37–0.47; PetNL 0.14–0.17; PetW 0.28–0.35; PetH 0.17–0.22; PetL 0.14–0.22; T1W 0.42–0.47; TL 1.98–2.20.

Male measurements (n=5). HL 0.42–0.44; HW 0.38–0.41; SL 0.12; ML 0.73–0.82; PrL 0.08; PrW 0.26; PetNL 0.12–0.16; PetW 0.17–0.20; PetH 0.14–0.16; PetL 0.15–0.16; T1W 0.30–0.35; TL 1.66–1.68.

Worker description. Body yellow to light brown. Integument covered by superficial, fine, and dense punctulate sculpturing; head dorsum with interval between the punctures one or two times the diameter of each puncture. Pubescence abundant over the entire body.

Head, in full-face view, slightly longer than broad; mandibles with basal teeth as large as the median one; basal margin straight. In full-face view, clypeus evenly rounded anteriorly. Antennae with 12 segments; apical antennomeres separated by deep constrictions. Eyes placed immediately after the head midheight.

In dorsal view, pronotum slightly broader than long. In profile, distance between the propodeal spiracles 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 times the diameter of the spiracle.

In lateral view, petiolar node as long as high. Subpetiolar process with its anterior and posterior margins parallel; posterior margin concave; posteroventral angle obtuse.

Queen. Distance between the propodeal spiracle and the propodeal dorsum corresponding to twice the diameter of the spiracle.

Male. In full-face view, anterior and posterior margins of clypeus medially rounded. Distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to less than half the diameter of the spiracle; distance between the propodeal spiracles and the propodeal dorsum corresponding to almost twice the diameter of the spiracle.

Etymology. Unknown.

Distribution. *Prionopelta amabilis* is known from southeastern Mexico to southeastern Brazil.

Comments. Besides its diagnostic characters, the species is recognized by its abundant pilosity. Although *P. amabilis* occurs in sympatry with *P. antillana* and both are quite similar by having a superficial sculpturing, the interval between the individual sculptures in *P. amabilis* is shorter. Also, *P. antillana* has the basal teeth of mandibles distinctly larger when compared with the median ones, while in *P. amabilis* they have a similar size. Central America specimens of this species may present dark spots on the midline and occipital portion of head and around the eyes, which are less visible in specimens occurring through southern Central American countries to be almost imperceptible in the specimens from South America.

Natural history. Notes about ecology and behavior of *P. amabilis* were provided in Hölldobler & Wilson (1986) and Hölldobler *et al.* (1992), who collected and examined colonies of the species in a secondary rainforest of the province of Heredia, Costa Rica. The colonies are large and polydomous, sometimes with more than one inseminated queen. Both queens and workers can have well-developed eggs in the ovaries, *Prionopelta* queens may have a high oviposition rate, since the abdomen might contain a mass of over 100 eggs; worker's trophic eggs are persistently presented to the queen.

Workers can be found foraging solitarily on the interstice between soil and leaf litter and occasionally accompanied by immatures, which suggests that brood can be often moved away from the original nest sites. This could explain in part the locally abundant presence of *Prionopelta* species despite its sparse distribution. In observations about food

preference, the ants proved to be effective predators of small arthropods, particularly campodeid diplurans (Hölldobler & Wilson, 1986).

Hölldobler & Wilson (1986) described the division of labor in *P. amabilis* as rudimentary but well-marked and correlated it with a change in the condition of the workers' ovaries. Grooming between workers and the queen are more frequent than among workers. A behavior of self-grooming was also found in the queen, who projects the gaster forwards and licks its apex and ventral surface.

Regarding the nest structure, small chambers comprises the basic configuration. Queen, eggs, larvae and some workers occupied the bare and moist chambers. In contrast, a segregation of pupae into wallpapered galleries was present. These galleries were papered by fragments of pupal cocoons forming several layers, maybe to keep the cocoon from growing too moist.

Prionopelta amabilis workers may present a rapid alarm response to air currents and illumination. The response consists in a body's vibration that last almost two seconds. This behavior was also observed when workers approximated to the queen or in a first contact between two workers. A foot-dragging phenomenon was observed when the workers were placed on a strange surface or forced to emigrate. Hölldobler *et al.* (1992) explored this phenomenon: "workers and queens of *P. amabilis* present basitarsal glands in the hind-legs, which secretions are employed in chemical communication, specifically during recruitment to food sources and to new nesting sites". The phenomenon described as "foot-dragging" in Hölldobler and Wilson (1986) constitutes the way in which the ants deposited the gland secretions on the substrate, and is complemented by a mechanical signal, a body shacking behavior, also described in the same work.

Additional material examined (184 specimens). BRAZIL: Acre: Mâncio Lima, Serra do Divisor, Barreiro, 07°27'9.22"S 73°39'58.24"W, 260m, 15-18.xi.2016, Winkler, R.M. Feitosa, T.S. Silva & A.C. Ferreira cols. (1 worker) [DZUP]; same data (1 queen, workers) [DZUP]. Porto Water, 08°15'31.2"S 72°46'37.1"W, 05.ii-17.iv.1997, J. Caldwell col., #12917, #1051, *E. hahnelii* (1 worker) [CPDC]; same data, #12747 (1 queen) [CPDC]. **Amazonas:** Balbina, 19.iv.-02.v.1988, N. Degalier col., armadilha interceptação, isca de fezes humana (1 queen) [MPEG]. Manaus, 23.i.1994, A.G. Casimiro col., #4832, Rs3304 (1 worker) [CPDC]; Manaquiri, xi.2009, Winkler, T2 4/500 (1 worker) [INPA]. Pres. Figueiredo IPE Inchado, L. Balbina, 13.xii.1994, Mata primaria, Arm. de solo, Queiroz col. (1 worker) [INPA]. **Bahia:** Aritaguá, 23.xi.1998, J.R.M. Santos col., cacau (1 worker) [CPDC]; same data (2 workers) [CPDC]. Barrolândia, CEPLAC, 16°06'S 39°17'W, 06-07.iv.2002, L.S. Ramos & S. Lacau cols., 66 (4 workers) [CPDC]. Faz. Boa Esperança, Camamu, 19.iii.1992, Silveira J.E. col., #4517 (2 workers) [CPDC]. Ilhéus, 14°46'27.6"S 39°13'16.7"W, 05.v.2014, Silvestre, R. et al. col. (1 worker) [UFGD]. CEPEC, 14.ii.1991, B. Santos col., #4377 (1 worker) [MZSP]; same data, 16.i.1991, B. Santos col., #4377 (1 worker) [CPDC]; same data, x.96, Santos J.R.M. cols., (1 worker) [CPDC]; same data, 27.vii.2000, S. Lacau col., (1 male, 1 queen, 1 worker) [CPDC]; same data, cacau, v.1998, Carmo, J.C.S. col. (2 workers) [CPDC]. Itati, Serra das Piabas, -13°57'26"S 40°01'51"W, 800m, 16-19.xi.2004, Lacau L. & Jahyny, J. cols. (4 workers) [CPDC]. Jussari, 15°08'26"S 39°31'29"W, 26.v.1999, J.C.S. Carmo & J.R.M. Santos cols., 66 (1 queen, 2 workers) [CPDC]; same data, Anuri, 152530S 0392719W, 27.v.1999, Santos, J.R.M. col., 66 (1 queen) [CPDC]. Uruçuca, 12.viii.1991, Santos B. col., #4463, Emarc_Q. 5 (2 workers) [CPDC]. **Pará:** Belém,

13.xi.1974, D. Dias col., 13282 (2 workers) [MPEG]. Mocombo, 06.ii.1979, M.F. Torres col. (1 worker) [MPEG]. Curionópolis 06°13'47.1"S 49°45'20.5"W, 5-7.viii.2017, M.G.T. Tavares col., C2T1, Winkler 4 (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., Hora 5, busca ativa (1 worker) [MPEG]. Marituba, 1°22'S 48°20'W, 19.x.2004, Santos, J.R.M. cols., 21 (1 queen) [CPDC]. Paragominas, 2°59'S 47°21'W, i-vii.2011, R. Solar col., baited pitfall, B324, P25, T7, UFV LABECOL, n°000157 (1 queen) [UFVB]. Tailândia, Agropalma, Dendê 22.60577S 48.86185W, 20.vi.2016, R.R. Silva & E.L. Siqueira cols., Winkler 9 (1 worker) [MPEG]; same data, Palma Área 4, 2.61787S 48.87190W, 18.vi.2016, R.R. Silva & E.L. Siqueira cols., Winkler 6 (1 worker) [MPEG]. **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., A11P4 (1 worker) [DZUP]. **São Paulo:** Caraguatatuba, Res. Flor. -40m, 22.v-1.vi.1962, Exp. Dep. Zool. (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 19 (3 workers) [MZSP]. São Vicente, Pq. Estadual do Xixová Japuí, 23°59'S 46°23'W, 18.iv.2011, Rodolfo da Silva Probst col., Winkler 6, Borda Transecto 1 (2 workers) [MZSP]. **Tocantins:** Araguaína, EMVZ-UFT, 1.iv.2016, W.H. Brandão & V.E. Sandoval cols., Amostra 63, Antweb1032566 (1 queen) [UFVB]. **COLOMBIA: Chocó:** 100m Lloró, 22.iii.1988, Emp. Gonz. H-O, BIOTA CASENT 0810414 (2 workers) [MIZA]. **Isla Gorgona:** M.L. Baena col., GAcd13 (1 worker) [MZSP]. **Letícia:** 7km N. Letícia, 10-25.ii.1972, S.J. Peck col., en hojarasca; BIOTA CASENT 0810431 (1 worker) [MIZA]. **COSTA RICA: Alajuela:** Bijagua, 10.71400 -85.03600 ±2km, 1000m, 15-19.viii.2010, M. Pollet & A. De Braekeleer cols., Pan trap, Wet forest; CR/HE/PR/BPT01-05; CASENT0636122 (1 queen) [JTLC]. Prov. Río Peñas Blancas, 10.302N 34.706W, 940m, 04.vii.1984, J. Longino col., within day coll. no 1-stray (1 worker) [JTLC]; same data, 10°18'N 84°45'W, 950m, 02.ii.1994, J. Longino col., #3528, INBIO CRI001 282968 (1 queen) [JTLC]. **Osa Península Corcovado:** Río Pavo, 16.vii.1982, J. Longino., #1200, LACM ENT 142624 (1 queen) [JTLC]. **Limón:** Res. Biol. Hitoy-Cerere, 9.65238 -83.02206, 670m, 11.vi.2015, Ex sifted leaf litter, tropical rainforest; ADMAC#Wm-E-02-1-06; CASENT0637017 (1 worker) [JTLC]. Prov. Río Pacuare, 200m, 10°01'N 83°31'W, 20.ii.1994, J. Longino col., #3576, INBIO CRI001, 282736 (1 male, 1 worker) [JTLC]. **Puntarenas:** 13km SSW Pto. Jiménez, 8.40667 -83.32833 ±200m, 130m, 10.iii.2008, J. Longino col., #6209-38, Ex sifted leaf litter, tropical rainforest; CASENT0636084 (1 queen) [JTLC]; same data, CASENT0636083 (1 worker) [JTLC]. **ECUADOR: Morona Santiago:** Los Tayos, 03.viii.1976, Tjitte de Vries (1 queen) [MZSP]. Cuyabeno, 12.x-05.xi.94, J.P. Caldwell col., #10750 (1 worker) [CPDC]. Prov. Napo, Limoncocha, 00°24'S 76°36'W, 280m, 13.viii.1973, Marian Rettenmeyer col., #68 (1 worker) [MZSP]. **FRENCH GUIANA:** Kaw Mountain, 04°38'N 52°18'W, ix.2008, S. Groc & A. Dejean cols., #5628, Winkler, VK3, Sous-le-vent; VK3 Tr1 W47 (1 queen, 1 worker) [CPDC]. Nouragues station, 04°08'N 52°64'W, ix.2009, Sara Groc & al cols., #5636, Winkler, FL2-Liana For.; FL2 Tr2 W28 (1 worker) [CPDC]; same data, Petit Plateau, 120m, 4.08085 -52.68255, 200m, 28.viii.2018, Cody Raul Cardenas col., CRC180828-02, rainforest, leaf litter, winkler, rich leaf litter at branch of fallen tree (11 workers) [DZUP]. **Saúl:** Mont Chauve, 17.iv.1997, R. Garrouste col., Berlese, Inselberg-Berlese-250m (1 queen) [CPDC]. **Sinnamary:** Petit-Saut, xii.1997, S. Lacau col., (1 queen, 3 workers) [CPDC]; same data, 02-28.xi.2001, S. Lacau & G. Fleck col. (3 workers) [CPDC]. **GUATEMALA: Zacapa:** 2km SE La Unión, 14.95384 -89.27631,

±50m, 1430 m, 12.v.2009, LLAMA#Wa-B-03-2-27, treefall gap in cloud forest, ex sifted leaf litter, CASENT0612530 (1 queen) [JTLC]; same data, 3.5km SE La Unión, 14.95000°N 89.26667°W, 1500m, 4.vi.1991, R.S. Anderson col., #91-050, CASENT0603554 (1 worker) [JTLC]. **HONDURAS: Comayagua:** PN Cerro Azul Meambar, 14.86613 -87.89735 ±70m, 940m, 21.v.2010, LLAMA, montane rainforest, ex sifted leaf litter, MaxiWinkler, CCDB-1055, CASENT0617263 [JTLC] (1 worker examined by images). **MEXICO: Chiapas:** 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]; same data, CASENT0610360 (1 worker). 12 mi NW Ocozocoautla, 3200ft, 4-5.ix.1975, A. Newton col., BIOTA CASENT 0810416 (1 queen) [MIZA]. **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, 18.58038 -95.08110 ±20m, 420m, 30.v.2016, ADMAC#Wm-F-01-1-05, tropical rainforest, ex sifted leaf litter, CASENT0640281 (1 queen) [JTLC]; same data, CASENT0640286 (1 worker) [JTLC]; same data, #9558-2, CASENT0631748 (1 worker) [JTLC]; same data, vii.2001, A. Pezon col. (1 worker) [CPDC]; same data, 18.58461 -95.07375 ±20m, mature wet forest, nest in dead wood, CASENT0631749 (1 male) [JTLC]. **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]; same data, #JTL7365-s, wet forest, CASENT0619921 (1 queen) [JTLC]; same data, CASENT0619986 [JTLC] (1 worker examined by images). **Jinotega:** PN Cerro Saslaya, 13.477199 -84.99771 ±20m, 710m, 08.v.2011, LLAMA#Wm-D-02-1-09, montane wet forest, ex sifted leaf litter, CASENT0628797 (1 worker) [JTLC]; same data, CASENT0628800 (1 queen) [JTLC]. **PANAMA: 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) [JTLC]. **Darién:** Reserva Chucanti, 8.78803 -78.45035 ±50m, 720m, 20.i.2015, J. Longino col., #9071-s, moist forest, ex sifted leaf litter, CASENT0633570 (1 worker) [JTLC]. **PERU: Cusco:** Est. Biol. Villa Carmen, 520m, 05-15.viii.2013, -12.894740° -71.403850° ±300 m, Ant Course 2013, successional vegetation, crops and pastures (2 workers) [DZUP]. Quincemil, km8, 13°13'03"S, 70°43'40"W, 633m, 20.viii-1.ix.2012, Malaise, Cavichioli, Rafael, Santos & Takiya cols. (2 males) [DZUP]. **Divisoria:** 02.iv.1988, SJS16, *Camellia sinensis* nos E. colombianus (3 workers) [CPDC]. **Madre de Dios:** Puerto Maldonado, Sachavacayoc Centro, 12°51'15.4"S 9°22'15.9"W, 209m, 19-31.vii.2012, Ant Course (1 worker) [DZUP]; same data, R.M. 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., Neotropical AntCourse, UFV LABECOL, n°000041 (1 worker) [UFVB]. **SURINAME: La Poulle,** viii.1959, I.V.D Drift, 18-XIVcd-13 (3 workers) [MZSP]. **VENEZUELA: Aragua:** Est. Biol. Rancho Grande, 10.34756°N 67.68787°W, 1140m, 11.viii.2008, J. Longino col., #6439-s, montane wet forest, ex sifted leaf litter, JTLC000015024 (1 worker) [JTLC]. Parque Nacional Henri Pittier, Paso Portachuelo, 10.34761°N 67.68780°W, 1100m, 09-19.viii.2008, cloud forest, Ant Course, #1211 (1 queen) [MZSP]. **Bolívar:** 10km E Icabaru, 700m, 05.vii.1987, S. J. Peck, corteza árbol y musgo, BIOTA CASENT0810411 (1 queen) [MIZA]. Río Cuyuní, 66km SSE El Dorado, 250m, 11.viii.1986, P.S. Ward col., #8537.1, sifted litter (leaf mold, rotten wood), rainforest, BIOTA CASENT0810417 (2 workers) [MIZA]. **Carabobo:** Canoabo, Sector Palmichal, 10.2932° -68.2342°, 900m,

14.vi.1998, 5.3km, F. I. T (2 queens) [DZUP]. **Miranda:** 35km N. Altagracia, Guatopo NP Agua Blanca, 400m, 31.v.1988, S.J. Peck col., hojarasca quebrada, BIOTA CASENT0810420 (1 worker) [MIZA]. P. N. Guatopo, Qda. La Culebra, vía Sta. Teresa-Agua Blanca, 220m, 18.viii.1984, #560, I.Z.A U.C.V. (2 workers) [MIZA]. **Portuguesa:** Qda. La Guata, 12km SE Biscucuy, 600m, 21.v.1983, J. Lattke col., ii.466, I.Z.A. U.C.V., BIOTA CASENT 0810419 (1 male, 1 worker) [MIZA]; same data, #462 (1 queen, 1 worker) [MIZA]; same data #464 (3 workers) [MIZA]; same data, #466 (1 male, 2 workers) [MIZA]. **Táchira:** Media Libra, Rio Negro Rd past Puente Santa Elena, 600-630m, 9.xii.1985, J. Lattke & W. L. Brown col., BIOTA CASENT0810409 (3 workers) [MIZA]; same data, 10.xii.1985, BIOTA CASENT0810408 (1 queen) [MIZA]. San Cristóbal- La Florida Rd. Caño Seco, La Blanca, 1125m, 09.xii.1985, J. Lattke & W.L. Brown cols., BIOTA CASENT0810410 (1 queen) [MIZA].

Prionopelta antillana Forel, 1909

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Prionopelta punctulata subsp. *antillana* Forel, 1909: 239. Syntype, ANTILLES: St. Vincent, Forel, CASENT0102529 (2 workers) [ZMUC] (1 examined by images). (upper worker in the pin here designed as **lectotype**).

Raised to species: Brown, 1960: 177.

Diagnosis. In full-face view, mandibles with basal teeth distinctly larger than the median one; clypeus medially projected anteriorly. Interval between the punctures of malar area conspicuous. Antennae with 12 segments. In lateral view, subpetiolar process with its posterior margin concave; anterior and posterior margin of the subpetiolar process parallel.

Worker measurements (n=22). HL 0.50–0.60; HW 0.40–0.50; SL 0.22–0.34; ML 0.57–0.62; PrL 0.24–0.28; PrW 0.27–0.34; PetNL 0.10–0.16; PetW 0.22–0.27; PetH 0.14–0.20; PetL 0.12–0.18; T1W 0.26–0.40; TL 1.46–1.76.

Queen measurements (n=9). HL 0.60–0.68; HW 0.52–0.55; SL 0.30–0.36; ML 0.80–0.96; PrL 0.14–0.17; PrW 0.36–0.47; PetNL 0.16–0.20; PetW 0.31–0.37; PetH 0.22–0.28; PetL 0.20–0.22; T1W 0.45–0.57; TL 2.01–2.37.

Male measurements (n=1). HL 0.58; HW 0.54; SL 0.18; ML 1.00; PrL 0.10; PrW 0.40; PetNL 0.12; PetW 0.26; PetH 0.22; PetL 0.18; T1W 0.40; TL 2.10.

Worker description. Body yellow to light brown. Integument covered by superficial, fine, and sparse punctulate sculpturing; head dorsum with interval between the punctures twice or thrice the diameter of each puncture.

Head, in full-face view, slightly longer than broad; mandibles with basal tooth larger than the median one; basal margin convex. In full-face view, clypeus slightly projected medially. Antennae with 12 segments; apical antennomeres separated by deep constrictions. Eyes placed immediately after the head midheight.

In dorsal view, pronotum slightly broader than long. In profile, distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to almost

one time the total diameter of the spiracle; distance between the propodeal spiracles and the propodeal dorsum corresponding to two or three times the diameter of the spiracle.

In lateral view, petiolar node as long as high. Subpetiolar process with its anterior and posterior margins parallel; posterior margin concave; posteroventral angle acute.

Queen. Distance between the propodeal spiracles and the propodeal dorsum corresponding to twice the diameter of the spiracle.

Male. In full-face view, anterior margin of clypeus medially projected; head dorsum with sparse point-like sculpture, rendering the integument shiny. Distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to one time the diameter of the spiracle; distance between the propodeal spiracle and the propodeal dorsum corresponding to almost twice the diameter of the spiracle.

Etymology. Although not explicit in the original description, the name may refer to the type locality, the Lesser Antilles.

Distribution. *Prionopelta antillana* is known from northeastern Honduras to south Brazil.

Comments. The limits between *P. antillana* and *P. amabilis* have been the main taxonomic problem of the genus in the Neotropics. Considering the morphological similarity and sympatric distribution shared with *P. amabilis*, authors as Brown (1960) have suggested that *Prionopelta* may include interspecific morphological variations. Therefore, the South American specimens of *P. amabilis* have been considered probable morphological variations of *P. antillana*. Here, the differences between the two species are recognized, mainly in terms of the size of the basal teeth of mandibles when compared with the median ones and the sparse superficial sculpturing found in *P. antillana*, which is denser in *P. amabilis*.

Natural history. The species is known from litter samples collected in forest. Deyrup *et al.* (2000) reported the species as introduced from the Lesser Antilles or Central America to the state of Florida, where it is "common in rotten wood in parts of Marion and Sumter County".

Additional material examined (2414 specimens). **ARGENTINA:** Carretera Tiara Las Tejeiras, 1200m, 20.vi.1982, O. Aponte col., en hojarasca, BIOTA CASENT0810392 (1 worker) [MIZA]. **BRAZIL: Acre:** Mâncio Lima, P. N. Serra do Divisor, 245m, Winkler, 07°26'17.19"S 73°39'27.39"W, 15-18.xi.2016, R.M. Feitosa, T.S. Silva & A.C. Ferreira cols. (1 worker) [DZUP]. **Alagoas:** Quebrângulo-wc, 0919S 3628W, 31.viii.1999, Santos, J.R.M. col., 66 (4 workers) [CPDC]; same data (2 workers) [DZUP]. **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, LO2P9W7 (2 workers) [MPEG]. **Bahia:** Colônia de Una, 151542S 0390912W, 12.vi.1997, Santos, J.R.M. col. (1 worker) [CPDC]. Ibicaraí, Km 41, 145375S 0392901W, 21.xi.1998, Santos, J.R.M. col., 66 (1 queen, 2 workers) [CPDC]. Ilhéus, Banco do Pedro, 44051S 0391524W, 12.i.1998, Santos, J.R.M. & Carmo J.C.S. cols., 66 (1 male) [CPDC]. CEPEC, ii.1998, Exp. JDMajer, #5218 (1 worker) [CPDC]. Faz. Nova Esperança, 11.ix.1997, L.S. Ramos cols. (3 workers) [CPDC]. Itabuna, Mata Atlântica, 14°27'50.7"S 39°10'26.3"W, 19.i.1998, Santos, J.R.M. col., (2 queens, 1 worker) [UFGD]. Mata da Boa Esperança, 14°47'47"S 09°03'56"W, 09.xi.2000, Santos, J.R.M. col., Winkler (1 queen, 1 worker) [MZSP]. Itacaré,

Taboquinha, 06-20.xii.1996, Santos, J.R.M. col. (2 queens) [CPDC]; same data, 20.xii.1996 (1 worker) [CPDC]. Mata São João, Reserva Sapiranga, 12°33'29.3"S 33°02'35.2"W, 21-28.vii.2001, Silva R.R. & Brandão C.R.F. cols., Winkler (1 queen, 2 workers) [MZSP]. Olivença, Mata Atlântica, 14°59'13"S 39°00'4.2"W, 16-xi.1996, Santos, J.R.M. col., (2 workers) [UFGD]. Una, 15°15'78"S 39°03'13"W, 04.v.1998, Carmo, J.C.S. col. (1 worker) [CPDC]. EDJABE, 07-12.viii.1994, S. Lacau col. (1 worker) [CPDC]. **Goiás:** Campo Limpo, Fazenda Conceição, 16°19'51.0"S 49°09'49.2"W, 01-07.vii.2005, Silva R.R. & Feitosa R.M. cols., Winkler (2 workers) [MZSP]; same data, 20-24.i.2005 (1 queen, 2 workers) [MZSP]. 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 (4 workers) [MZSP]. Jataí, Faz. Aceiro, 31.x.1962, Exp.Dep. Zool., #3369 (1 male, 1 queen, 7 workers) [MZSP]. Faz. Ariranha, 17°57'34"S 51°51'34"W, 797m, 11.ii.2009, G.G. dos Santos col., Mini-Winkler (4 queens, 206 workers) [DZUP]. Faz. Lageado, 17°49'51"S 51°37'21"W, 856m, 19.ii.2009, G.G. dos Santos col., Mini-Winkler (11 queens, 117 workers) [DZUP]. Faz. Leão, 17°48'24"S 51°41'41"W, 861m, 21.ii.2009, G.G. dos Santos, Mini-Winkler (16 queens, 123 workers) [DZUP]. Faz. Primavera, 17°51'54"S 51°39'56"W, 817m, 9.xi.2008, G.G. dos Santos col., Mini-Winkler (3 queens, 88 workers) [DZUP]. Faz. Rio Paraíso, 17°42'48"S 51°37'39", 02.xi.2011, Diniz col., A1: Mata semidecidual, Winkler (95 workers) [DZUP]; same data, 17°42'56"S 51°37'45"W, 28.ix.2009 (155 workers) [DZUP]; same data, 17°44'30"S 51°37'13"W, 03.xi.2011, A2: Mata seca (2 queens, 94 workers) [DZUP]; same data, 17°44'55"S 51°34'35"W, 10.xi.2011, A5: Mata semidecidual (1 queen, 100 workers) [DZUP]; same data, 17°44'8"S 51°38'20"W, 06.xi.2011, A4: Mata de galeria (1 queen, 35 workers) [DZUP]. Faz. Sta. Gertrudes, 17°50'07"S 51°43'04"W, 876m, 02.ii.2009, G.G. dos Santos col., Mini-Winkler (3 queens, 38 workers) [DZUP]. Faz. Sta. Lucía, 17°50'15"S 51°39'23.9"W, 793m, 11.x.2008, G.G. dos Santos col., Mini-Winkler (1 queen, 112 workers) [DZUP]. Faz. Sertãozinho, 17°55'14"S 51°45'25"W, 843m, 18.ii.2009, G.G. dos Santos col., Mini-Winkler (2 queens, 122 workers) [DZUP]. M. Açude, 17°51'31"S 51°43'37"W, 12.xii.2005, G. Santos & G. Paniago cols., pelo chão (1 queen) [DZUP]; same data, 16.xii.2005, G. Paniago col., INSC (Esquerdo) 12 (1 worker) [DZUP]; same data, G.G. dos Santos col., M.Winkler (90 queens, 262 workers) [DZUP]. Montividiu, Faz. Veneza, 17°24'54.62"S 51°29'2.44"W, 960m, 07.iii.2009, G.G. dos Santos col., Mini-Winkler (2 queens, 38 workers) [DZUP]. Ouro Verde, Faz. Boa Vista, 16°17'54.5"S 49°12'42.6"W, 01-07.vii.2005, Feitosa R.M. col., Winkler (1 worker) [MZSP]; same data, 20-24.i.2005, Silva R.R. col. (1 worker) [MZSP]. Serranópolis, Faz. São Cristovão, 18°5'32.87"S 52°2'23.85"W, 817m, 10.i.2009, G.G. dos Santos col., Mini-Winkler (8 queens, 122 workers) [DZUP]. **Maranhão:** Açailândia, Horto Fazenda Pompeia, 04°52'30"S 47°17'40"W, 13-22.ii.2006, Silva R.R. & Feitosa R.M. cols., Winkler (1 queen) [MZSP]. **Mato Grosso:** Utiariti, Rio Papagaio, 26.x.1966, Lenko & Pereira cols., #4487 (3 workers) [MZSP]; same data (3 workers) [INPA]. **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. col. (1 worker, 1 queen) [UFGD]. Antônio João, Faz. São Gabriel, 22°06'36.4"S 55°35'31.6"W, vii.2006, Silvestre, R. col., Winkler (4 workers, 1 queen) [UFGD]. Porto Murinho, Chaco Florestado, Fazenda Patolá, 21°42'0.29"S 57°43'7.73"W, 07.iii.2012, P.R. Souza & N. Rodrigues cols., Pitfall (1 worker) [DZUP]. **Minas Gerais:** Ipaba, Faz. Macedônia, RPPN/CENIBRA, xi.2005, Marques T. col., UFV LABECOL n°000158 [UFVB]. Parna do Cipó, Cachoeira da

Farofa, -19.379412 -43.575782, 877m, 11.v.2016, J.Chaul col., Jcwinkler#014 (epigaeic) (1 queen) [UFVB]. Parque Estadual do Rio Doce, 19°47'49"S 42°34'38"W, 280m, 23-24.viii.2005, TEAM exped., Mini-Winkler, Trilha de Garapa Torta, Floresta Atlântica Estacional, Semidecidual (1 worker) [DZUP]. **Pará:** Belém, Benfica 12-19.viii.1962, K. Lenko col., #4266 (2 workers) [DZUP]; same data, #4530 (2 workers) [MZSP]. 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., C2T1, Winkler (1 worker) [MPEG]; 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) [MPEG]. Itaituba, Mina do Palito, Área S3, 06°19'01.8"S 55°47'55.7"W, 26.i.2018, Silva R.R. & Prado L.P. col., Winkler (2 workers) [MPEG]; same data, Copper Rios, 06°18'50.9"S 55°48'07.3"W, 30.i.2018 (1 worker) [MPEG]. Marituba, 1°22'S 48°20'W, 22.x.2004, Santos, J.R.M. cols. (1 worker) [DZUP]. Parauapebas, Mina de Arenito, 0585852 9323986 UTM, 14-16.x.2017, E.Z. Albuquerque & M.G.T. Monteiro cols., Winkler (1 worker) [MPEG]; same data, 0585343 9327185, 04.iv.2018 (3 workers) [MPEG]. Serra Norte, Est. Manganês, 21.x.1984 (15 workers) [MPEG]. Serraria, 31.i.1985, Berlese (1 worker) [MPEG]. **Paraíba:** Mamanguape, Rebio Guaribas II, 11.xi.2015, Brisa Lunar, Winkler (2 workers) [DZUP]. **Paraná:** Foz do Iguaçu, Parque Nacional do Iguaçu, 25°37'40"S 54°27'46"W, 221m, 07-13.xi.2015, Trad, B.M. & Lopez, V.M. cols., Winkler (3 queens, 6 workers) [UFGD]. Parque Estadual São Camilo, 24°19.276'S 53°55.24'W, 23.ix.2015, Busanello D. & Caron E. cols. (8 workers) [DZUP]. Reserva Biológica das Perobas, 23°50'39"S 52°44'43.26"W, 18.ix.2015, Busanello D. & Caron E. cols. (5 workers) [DZUP]; same data, 23°50'9.78"S 52°45'17.28"W (10 workers) [DZUP]. Rondon, iv.1965, F. Plaumann col., #4767 (2 queens, 10 workers) [MZSP]; same data, 24°38'B 54°0'T L (1 worker) [MZSP]. Tuneiras do Oeste, REBIO das Perobas, 23°50'S 52°45'W, 540m, 18.ix.2015, E. Caron col., Winkler (1 queen, 8 workers) [DZUP]. **Santa Catarina:** Paineis-Base Aranjada do IBAMA, 18.v.2013, Feitosa, R.M. col., solo (3 workers) [DZUP]. 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 (1 queen) [MZSP]. **São Paulo:** Matão, Faz. Cambuhy, Mata do São Joãozinho, 21°37'35.5"S 48°33'24.8"W, 12.iv.2014, M.A. Ulysséa & L.P. Prado, Winkler (5 workers) [MZSP]; same data, 29-31.x.2017, Prado L.P., Adams R., Almeida R.P.S. & Silva J.A. cols., Mata da Virgínia, busca ativa (3 workers) [MPEG]. 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). **Sergipe:** NS das Dores, 10°27.5'S 37°07.6'W, 01.ix.2014, Almeida, R.P.S. col., MBV, área APP (5 workers) [DZUP]. Sta. Luzia 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-3.viii.2001, Silva R.R. & Brandão C.R.F. cols. (6 workers) [MZSP]. **Tocantins:** Araguacema 08°59'20"S 49°40'41"W, 16-30.xi.2005, Silva R.R. & Feitosa R.M. cols., Winkler, Mata semidecidual (1 queen, 1 worker) [MZSP]; same data, 09°00'48"S 49°41'48"W (1 queen, 3 workers) [MZSP]. Araguaína, UFT, EMVE, Mata de Galeria, 01.iv.2016, V.E. Sandoval & S. Dantas cols., Pitfall (1 queen, 1 worker) [MPEG]. Palmeiras do Tocantins, 06°40'07"S 47°30'56"W, 01-09.vi.2005, Silva R.R. & Feitosa R.M. cols., Winkler (2 workers) [MZSP]; same data, 06°40'12.1"S 47°31'48.6"W (1 worker) [MZSP]. Paranã, Serra da Contenda, 13°21'27.5"S 47°40'32.4"W, 15.x.2004, Silva R.R. & Dietz B.H. cols., Winkler, Mata Ciliar (4 workers) [MZSP]. **COLOMBIA:** Meta: Cubarral, Vereda Aguas Claras, 03°47'56.1"N 73°53'48.1"W, 698m, 20-22.ii.2016, N. Ladino & C. Yara cols., Winkler, Piedemonte (14 workers) [DZUP]. Villavicencio, C.I. Corpoica, 4°4'24.0"N

73°28'21.6"W, 340m, 19-21.xi.2015, Bosque (7 workers) [DZUP]; same data, Unillanos, Sede Barcelona, 4°4'39.18"N 73°34'50.999"W, 389m, 21-23.iii.2016, N. Ladino col., Winkler, Bosque secundario (7 workers) [DZUP]. **COSTA RICA:** Ararat, 10.06528 - 83.54861, 400m, 10-11.viii.2002, Roisin & Vauthier cols., Winkler (5 workers) [CPDC]. Cartago, 4km E. Turrialba, 9°54'N 83°39'W, 550m, 13.v.1987, J. Longino col., wet forest, LACM ENT 142630, Ex sifted leaf litter (1 queen, 1 worker) [JTLC]. CATIE, nr. Turrialba, 9.9 -83.65, wet forest, Winkler, CASENT249588 (1 queen) [JTLC]. **Heredia:** 10°26'N 84°01'W, 50-150m, 01.vi.1993, INBio-OET, parcelas sucesionales B/01/099, INBIO CRI001 276880, Ex sifted leaf litter (1 queen, 1 worker) [JTLC]. **Limón:** Res. Biol. Hitoy-Cerere, 9.65727 -83.02598, 530m, 11.vi.2015, tropical rainforest; ADMAC#Wm-E-02-1-03, CASENT0632087, Ex sifted leaf litter (1 queen) [JTLC]. **FRENCH GUIANA:** **Saúl:** Mont-Chauve, 24.iv.1997, R. Garrouste col., Inselberg-Berlese-250m, Berlese (1 worker) [CPDC]. **HONDURAS:** **Gr. A Dios:** Las Marias, 15.72235 -84.88480, 620m, 10.vi.2010, tropical rainforest; LLAMA#Wm C-07-1-07, BOLD DNA voucher, CASENT0612386, Ex sifted leaf litter (1 queen) [JTLC]. **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) [JTLC]. **Chontales:** 2.5km NE Santo Domingo, 12.27641 -85.06350, 730m, 21.iv.2011, J. Longino, JTL7365-s, Ex sifted leaf litter, wet forest, bold DNA voucher, CASENT0613735 (1 worker) [JTLC]. **Matagalpa:** RN Cerro Musún, 12.96078 -85.23306, 750m, 01.v.2011, Ex sifted leaf litter, tropical wet forest, LLAMA#Wa-D-01-1-06, bold DNA voucher, CASENT0623928 (1 worker) [JTLC]. **PANAMA:** **Darién:** Reserva Chucantí, 8.78803 -78.45035, 720m, 20.i.2015, J. Longino #9071-s, Ex sifted leaf litter, moist forest, CASENT0633602 (2 queens) [JTLC]. **PERU:** **Cusco:** Est. Biol. Villa Carmen, -12.8940° -71.40385, 525m, J. Lattke #3382, NE 94km (4 workers) [DZUP]; -12.902437° -71.407672, 590m, 05-15.viii.2013, Ant Course, successional vegetation, crops and pastures (4 workers) [DZUP]; same data, -12.875296° -71.410954°, 300m, Rainforest (1 worker) [DZUP]; same data, -12.869043°S 71.407111°W, 800m (1 worker) [DZUP]. **Madre de Dios:** Puerto Maldonado, Sachavacayoc Centre, 12°51'15.4"S 09°22'15.9"W, 209m, 19-31.viii.2012, R.M. Feitosa col., Winkler (4 workers) [DZUP]. Tambopata Research Center, -13.14545 -69.61483, 276m, 01.vii.2000, D. Feener col., bamboo forest; CASENT0635236, Ex sifted leaf litter (2 workers) [JTLC]. **VENEZUELA:** **Territorio Federal Amazonas:** Alto Rio Sapo, 01°42'50"N 64°33'40"W, 495m, 04.ii.1989, J. Lattke col., BIOTA CASENT0810413 (1 worker) [MIZA]; same data, CASENT0810412 (1 worker) [MIZA].

Prionopelta marthae Forel, 1909

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Prionopelta marthae Forel, 1909: 240. Syntypes, VENEZUELA: Zig Zag, Forel, CASENT0102526 (3 workers) [MHNG] (1 worker examined by images); same data, (examined, 1 worker) [NHMB]; same data, Vargas, CASENT0902630, (examined, 1 worker here designed **lectotype**) [BMNH].

Combination in *Typhlomyrmex*: Brown, 1953: 104; in *Prionopelta*: Brown, 1965: 77.

Diagnosis. In full-face view, basal margins of mandibles slightly convex; mandibles with basal teeth distinctly larger than the median ones; clypeus slightly projected medially. Interval between the punctures of malar area conspicuous; antennae with 12 segments. In lateral view, subpetiolar process with its posterior margin concave; anterior and posterior margins of the subpetiolar process converging apically.

Worker measurements (n=13). HL 0.46–0.52; HW 0.37–0.45; SL 0.22–0.32; ML 0.50–0.57; PrL 0.22–0.25; PrW 0.24–0.30; PetNL 0.10–0.16; PetW 0.20–0.26; PH 0.15–0.22; PL 0.12–0.15; T1W 0.26–0.37; TL 1.36–1.63.

Queen measurements (n=3). HL 0.52; HW 0.46; SL 0.30; ML 0.76–0.78; PrL 0.14–0.18; PrW 0.38–0.40; PetNL 0.16–0.20; PetW 0.20–0.30; PH 0.18–0.20; PL 0.19–0.20; T1W 0.42–0.46; TL 1.90–1.92.

Worker description. Body light yellow. Integument covered by deep and sparse punctulate sculpturing; head dorsum with interval between the punctures once or twice the diameter of each puncture.

Head in full-face view longer than broad; mandibles with basal teeth distinctly larger than the median ones; basal margin convex. In full-face view, clypeus slightly projected medially. Antennae with 12 segments; apical antennomeres separated by deep constrictions. Eyes placed at the head midheight.

In dorsal view, pronotum almost as long as broad. In profile, distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to once the diameter of the spiracle; distance between the propodeal spiracle and the propodeal dorsum corresponding to twice the diameter of the spiracle.

In lateral view, petiolar node higher than long. Subpetiolar process with its anterior and posterior margins converging apically; posterior margin concave; posteroventral angle mainly obtuse.

Queen. Like conspecific workers, with the expected modifications for *Prionopelta* queens.

Male. Unknown.

Etymology. Unknown.

Distribution. The species is known from southwestern Guadeloupe to South Brazil.

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

Almost 50 years after its description, *P. marthae* was considered a synonym of *Typhlomyrmex rogenhoferi* Mayr, 1862 (Brown 1953), based on a mislabeled cotype of *P. marthae* found in the collection of William M. Wheeler (MCZC). In consequence, the species was excluded of the key provided by Brown (1960). Later, the species was recognized as a member of *Prionopelta*, even close to *P. antillana*, and returned to the genus in Brown (1965).

Prionopelta marthae can be similar to *P. antillana* in regard to the sculpture of the head dorsum and to *P. punctulata* by the orientation of the subpetiolar process's margins. The antennae with 12 segments separate the last species from *P. marthae*, while

a deeper sculpture and the apically convergent margins of the subpetiolar process are useful to differentiate the species from *P. antillana*.

Natural history. The species is mainly known from tropical rainforest, at litter samples in deciduous and semi-deciduous forests.

Additional material examined (203 specimens). **BRAZIL: Distrito Federal,** Brasília, Tabatinga, F.Z. Cooperbrás, 2003-2004, Schmidt F.G.V. col., (1 worker) [CPDC]. **Espírito Santo:** Sta. Teresa, 21.i.1994, I.C. Nascimento col., #4782 (7 workers) [CPDC]. **Goiás:** Jataí, Faz. Primavera, 17°51'54"S 51°39'56"W, 817m, 09.xi.2008, G.G. dos Santos col., Mini-Winkler (14 workers) [DZUP]; M. Açude, 17°51'31"S 51°43'37"W, 21.xii.2005, G.G. dos Santos col., Mini-Winkler, Parcela 09 (1 queen, 1 worker) [DZUP]; Faz. Sta. Lucía, 17°50'15"S 51°39'23.9"W, 793m, 11.x.2008, G.G. dos Santos col. (1 worker) [DZUP]. **Maranhão:** Açailândia, Horto Fazenda Pompeia, 04°52'30"S 47°17'40"W, 13-22.ii.2006, Silva R.R. & Feitosa R.M. cols., Winkler 4 (1 worker) [DZUP]. **Paraná:** Morretes, Parque Estadual do Pau-Ôco, 25°34'33.5"S 48°53'19.5"W, 06-11.v.2002, Silva, R.R. & Dietz, B.H. cols., (2 workers) [MZSP]; same data, (2 workers) [DZUP]. **Rondônia:** Porto Velho, Area Abunã, 9°38'36"S 65°26'54"W, 02-16.x.2013, Mazão G.R. & Mendoça R.T.T. cols., A11P1 (2 workers) [DZUP]. **Santa Catarina:** Blumenau, Parque das Nascentes, 27°06'15"S 49°09'14"W, 20-27.x.2000, Silva, R.R. & Eberhardt, F. cols., Solo-Winkler, 4 (1 queen, 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 8 (2 workers) [MZSP]. 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 35, Transecto 2 (4 workers) [MZSP]. **São Paulo:** M. Cruzes, R. Itatinga, 23°45'02"S 46°07'63"W, 720m, 12-vii.2000, M.S.C. Morini col., Winkler 12, Frasco 27, Área de mata, Manhã (1 worker) [CPDC]. Riberão Grande, Fazenda Intermontes, iv.2009, Cassadei-Ferreira, A., MT1 (1 worker) [MZSP]. Tapiraí, 24°01'55"S 47°27'56"W, 08-14.i.2001, Silva & Eberhardt cols., Winkler 38, Transecto 1 (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., (3 workers) [MZSP]; same data, 23°18'21.6"S 44°48'25.2"W, 400m, 05.i.2006 (2 workers) [MZSP]; same data, 16.iii.2006, (3 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:** Porto Nacional, Fazenda Alto Paraíso, 10°43'32"S 48°28'05"W, 05-06.x.2001, Albuquerque & Silva, cols., Cerradão (1 worker) [MZSP]. 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., (2 workers) [MZSP]. **COLOMBIA: Magdalena:** 4Km N. San Pedro, 10°57'N 74°03'W, 550m, J. Longino cols., #763-s, litter sample, wet forest, LACM ENT142650 (2 workers) [JTLC]; same data, 10.95 -74.05, P. S. Ward col., PSW07912-2, sifted litter (leaf mold, rotten wood), rainforest, CASENT0260463 (2 workers) [PSWC] (1 worker examined by images). **ECUADOR: Zamora-Chinchipec:** ENE Yantzaza, 3°44'44.59"S 78°36'51.70"W, 835m, 14.vi.2014, C. Gómez, M. Tuza, G. Piedra, M. Vélez & J. Latte cols., Winkler, Estação el Padmi, 18.7km, Universidad Nacional de Loja (32 workers) [DZUP]. **GUADELOUPE: Basse Terre:** Piton de Ste. Rose, 16.33166 -61.76206, 320m, 26.v.2012, R.S. Anderson col., RSA2012-148, ex. sifted leaf litter, deciduous forest, CASENT0630440, [JTLC]. **FRENCH GUIANA: Saúl:** Mont Chauve, 24.iv.1997, R. Garrouste col., Berlese, Inselberg, Berlese 250m (6 operárias) [CPDC]. **PERÚ: Cusco:**

Est. Biol. Villa Carmen, -12.902437°-71.407672° ±300m, 590m, 05-15.viii.2013, Ant Course 2013, 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, rainforest (2 workers) [DZUP]. **SURINAME: Tambah-redjo:** vi.1959, I.V.D. Drift col., 42-viiicd-2 (3 workers) [MZSP]; same data, 45-Dvla-7 (1 worker) [MZSP]. **VENEZUELA: Apure:** Caracas, Caño Maporal, 21.viii.1983, J. Lattke col., #455, [MIZA]. **Aragua:** Parque Nacional Henri Pittier, La Esperanza, 10°22'8"N 67°49'29"W, 870m, 03.ix.2003, E. Rodríguez, R. Luján & J. Lattke cols., #2337, Winkler, Floresta semi-decídua (32 workers) [DZUP]; same data, Hacienda Sta. María, 10.3602° - 67.8219°, 650m, 15.viii.2003, J. Lattke col., solo, #2669 (1 queen, 16 workers) [DZUP]. Vale Santa María, 4.8km SW Cumboto, 10.36667° -67.82667°, 860m, JEL 2842, E. Rodríguez, A. Grotto, J. Lattke cols., 03.ix.2003, La Esperanza, Bosque Semi deciduo, Ex hojarasca, CASENT0178694, (1 worker) [MIZA] (examined by images). **Táchira:** via Sta. Ana, Rio Frío, 1000m, 14.viii.1983, BIOTA CASENT0810424 (4 workers) [MIZA].

***Prionopelta modesta* Forel, 1909**

Figures 13–15, 25

Prionopelta modesta Forel, 1909: 241. Syntypes, GUATEMALA, Forel (2 workers), CASENT0102527 [MHNG] (examined by images). (1st worker here designated as **lectotype**).

Diagnosis. In full-face view, basal margins of mandibles slightly convex; mandibles with basal teeth distinctly larger than the median ones; clypeus evenly rounded anteriorly. Antennae with 12 segments. In lateral view, subpetiolar process with its posterior margin concave.

Worker measurements (n=11). HL 0.51–0.56; HW 0.38–0.56; SL 0.25–0.32; ML 0.52–0.64; PrL 0.24–0.34; PrW 0.26–0.34; PetNL 0.12–0.19; PetW 0.14–0.27; PH 0.14–0.22; PL 0.12–0.22; T1W 0.32–0.39; TL 1.52–1.75.

Queen measurements (n=4). HL 0.54–0.60; HW 0.48–0.52; SL 0.28–0.32; ML 0.77–0.86; PrL 0.14–0.17; PrW 0.40–0.42; PetNL 0.14–0.18; PetW 0.32; PH 0.22–0.26; PL 0.14–0.20; T1W 0.50; TL 2.02–2.06.

Worker description. Body yellow to light brown. Integument covered by deep and dense punctulate sculpturing; head dorsum with interval between the punctures once the diameter of each puncture.

Head, in full-face view, almost as long as broad; mandibles with basal teeth distinctly larger than the median one; basal margins convex. In full-face view, clypeus evenly rounded. Antennae with 12 segments; apical antennomeres separated by deep constrictions. Eyes placed at the head midheight.

In dorsal view, pronotum almost as long as broad. In profile, distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to once the diameter of the spiracle; distance between the propodeal spiracles and the propodeal dorsum corresponding to twice the diameter of the spiracle.

In lateral view, petiolar node as high as long. Subpetiolar process with its anterior and posterior margins parallel; posterior margin concave; posteroventral angle obtuse.

Queen. Like conspecific workers, with the expected modifications for *Prionopelta* queens.

Male. In full-face view, anterior margin of clypeus medially rounded; posterior margin medially converging to the frons and truncate at its median portion.

Etymology. Unknown.

Distribution. The species is known from northern Mexico to northwestern Colombia.

Comments. The species was commonly considered as the only Neotropical *Prionopelta* with dense sculpturing in the head dorsum, rendering the integument opaque. Although this trait can be currently used to separate *P. modesta* from the other species occurring in Central America, the denser sculpturing of head dorsum of all the members of the genus in the Neotropical region described in this work belongs to *P. sp. n. C*.

Natural history. The species is known from wet, secondary and montane forests in litter and dead wood. E. O. Wilson made observations of a colony fragment captured at Pueblo Nuevo, Mexico, currently accessible in the work of Brown (1960).

Colonies seem polydomous and loosely organized, with several fragments containing only workers, or workers and larvae, dealate and winged females.

A "cafeteria" experiment was realized in the aim to explore aspects of alimentary preference of the species. Although the ants are capable of biting, hanging onto and stinging relatively large arthropods like geophilomorph centipedes, the workers are timid foragers, frequently recoiling violently when in contact with the offered potential prey. However, the observations were not informative enough to determine what *P. modesta* feeds upon.

Additional material examined (53 specimens). COLOMBIA: Antioquia: Amalfi, Cañón del Rio Porce, 6°47'48.92"N 75°6'55.56"W, 1113.7m, xi.2006, M.A. Vanegas col., #11035, Winkler, Bosque secundario (2 workers) [UNAB]. La Calandria, 6°46'31"N 75°05'53"W, 1010m, 08.v.1998, F. Serna col. (2 workers) [UNAB]; same data (1 worker) [DZUP]. **COSTA RICA: Alajuela:** 6Km E Monteverde, 10.29897 -84.74932, 980m, 18.v.2014, J. Longino col., #8693-s, ex sifted leaf litter, CASENT0635127 (1 worker) [JTLC]; same data, CASENT0635130 (1 queen) [JTLC]. 6.5 Km E Monteverde, 10 18'N 84 45'W, 950m, 22.x.1985, J. Longino col., #861-s, ex sifted leaf litter, wet forest LACM ENT 142643 (1 queen, 1 worker) [JTLC]. Rio Peñas Blancas, 10.3167 -84.7167, 800m, 24.iv.1987, J. Longino col., #JTLC1578-s, CASENT0039774 (1 worker) [JTLC]. **Limón:** Cerro Plátano, 9.65727 -83.02598, 1020m, 16.vi.2015, ex sifted litter, cloud forest, ADMAC #Wa-E-03-1-36, CASENT0636747 (1 worker) [JTLC]; same data, 9.87132 -83.23955, CASENT0636750 (1 queen) [JTLC]. Res. Hitoy-Cerere, 9.65727 -83.02598, 530m, 11.vi.2015, ex sifted leaf litter, tropical rainforest, ADMAC #Wm-E-02-1-03, CASENT0632089 (1 worker) [JTLC]; same data, CASENT0632088 (1 queen) [JTLC]. **Puntarenas:** 10Km SW Pto Jiménez, 8.46553°N 83.36928°W, 240m, 12.iii.2008, J. Longino col., #6197-s, CASENT0601692 (1 worker) [JTLC]. **GUATEMALA: El Petén:** Cerro Cahuí, 17.00056°N 89.71992°W, 330m, 24.v.2009, J. Longino col., #6683.1, ex dead wood, moist forest, CASENT0611043 (1 worker) [JTLC]. **Izabal:** 16 Km ESE Morales, 15.41109°N 88.71184°W, 440m, 19.v.2009, ex sifted leaf

litter, 2° lowland rainforest, LLAMA #Wm-B-04-2-03 (1 queen) [JTLC]; same data, CASENT0611474 (1 worker) [JTLC]. **GUYANA:** Mt. Ayangana Base Camp, 5.33438 - 59.92477, 732m, 09.x.2002, J.S. LaPolla col., JSL021009-03-L-S01, litter sample, forest, USNM, determined by J. Sosa-Calvo, USNMENT00418417 (examined by images) (1 worker) [USNM]. **HONDURAS: Atlántida:** 7Km SSW Tela, 15.724667 -87.451935, 190m, 15.vi.2010, LLAMA, Wa-C-08-2-14, MiniWinkler, tropical rainforest, ex sifted leaf litter, alate/delate, CASENT0618342 (examined by images) (1 queen) [JTLC]; same data, 8 Km SSW Tela, 15.70961 -87.46828, 360m, 17.vi.2010, ex sifted leaf litter, tropical rainforest, LLAMA, #Wm C-08-2-07, CASENT0618691 (1 worker) [JTLC]. **Comayagua:** PN Cerro Azul Meambar, 14.87125 -87.90018, 1120m, 20.v.2010, ex sifted leaf litter, ridgetop cloud forest, LLAMA, #Wa-C-04-1-06, CASENT0615245 (1 queen) [JTLC]; same data, 14.87160 -87.90324, 880m, 21.v.2010, B. Boudinot col., BEB0198, mountain rainforest clearing in rotting wood or in soil (1 worker) [JTLC]; same data, 14.8716 -87.90324, 880m, montane rainforest clearing, BEBC-2Sep13, determined by Longino in 05.iii.2011, CASENT0615793 (examined by images) (1 male) [JTLC]. **MEXICO: Chiapas:** 2.8Km SE Custepec, 15°43'N 92°56'W, 1840m, 18.vii.2007, R. S. Anderson col., #2007-022, CASENT0602079 (1 worker) [JTLC]. 9Km SE Salto de Agua, 17°31'N 92°18'W, 50m, 14.vii.2007, R.S. Anderson col., #2007-011, CASENT0602008 (1 worker) [JTLC]; same data, CASENT0601990 (1 queen) [JTLC]. 12 mi NW Ocozocoautla, 3200ft, 4-5.ix.1975, A. Newton col., BIOTA CASENT0810416 (1 queen) [MIZA]. Laguna Metzabok, 17°08'N 91°88'W, 600m, 14.vii.2007, J. Luna-Cozar col., JTLC000009933 (1 worker) [JTLC]; same data, JTLC000009920 (1 queen) [JTLC]. **Isla Maria Madre:** 22.vi.1948, M. Cardenas, #9076, *Prionopelta amabilis* 1712 (4 workers) [MZSP]. **Oaxaca:** Uluapan, 4 Km NE Ayautla, 18.06018 -96.64484, 440m, 09.vi.2016, ex sifted leaf litter, lowland rainforest, ADMAC, #Wm-F-03-1-03, CASENT0640607 (1 worker) [JTLC]; same data, CASENT0640598 (1 queen) [JTLC]. **Veracruz:** Est. Biol. Los Tuxtlas, 18.58704 -95.07627, 170m, 31.v.2016, at bait, tropical rainforest, ADMAC, #Ba-F-01-2-04-09, CASENT0640202 (1 worker) [JTLC]; same data, 18.58625 -95.07665, 180m, 29.v.2016, ex sifted leaf litter, tropical rainforest, ADMAC, #Wa-F-01-2-18, CASENT0640340 (1 queen) [JTLC]. Los Tuxtlas, 10 Km NNW Sontecomapan, 18.58333 -95.08333, 200m, 20.iii.1985, P.S. Ward col., PSW07333-12, rainforest, sifted litter (leaf mold, rotten wood), CASENT0260466 (examined by images) (2 workers) [PSWC]. Sierra Taviscocla acima de Cuichapa, 04.viii.1965, W.L. Brown col. (6 workers) [JTLC]. **NICARAGUA: Jinotega:** Parque Nac. Saslaya, 13.76836 -85.02344 ±50 m, 1060m, 14.v.2011, J. Longino col., JTL7556, montane wet forest, under rotten wood, CASENT0619506 (1 worker) [JTLC]. **Matagalpa:** RN Cerro Musún, 12.96817 -85.23301, 1060m, 02.v.2011, ex sifted leaf litter, montane wet forest, LLAMA, #Wm-D-01-1-07, CASENT0624190 (1 worker) [JTLC].

Prionopelta punctulata Mayr, 1866

Figures 16–19, 26

Prionopelta punctulata Mayr, 1866: 505. Holotype worker, BRAZIL: Paraná, (1 queen) [NHMW] (examined by images). Syntypes. BRAZIL, Santa Catarina, Hecko CASENT0915650 (1 worker) [NHMW] (examined by images).

=*Prionopelta mayri* Forel, 1909: 239. BRAZIL, Santa Catarina, Blumenau, Mayr (1 worker) [NHMB]; same data (1 worker) [NHMB]; same data (1 worker) [NHMB]. Synonym by Brown, 1960:178.

=*Prionopelta bruchi* Santschi, 1923: 245. ARGENTINA, Tucumán, N. Kusnezov (1 male) [MZSP]; Sammiung, Fritz Schneider, Wadenswil, 1997 (4 males) [NHMB]; same data, CASENT0172313 (1 male) [ANIC]. Synonym by Brown, 1960:178.

Diagnosis. In full-face view, basal margins of mandibles convex; clypeus slightly medially projected. Antennae with 11 segments.

Worker measurements (n=5). HL 0.44–0.57; HW 0.39–0.44; SL 0.22–0.26; ML 0.54–0.58; PrL 0.22–0.26; PrW 0.28–0.38; PetNL 0.12; PetW 0.22–0.24; PH 0.15–0.16; PL 0.12–0.16; T1W 0.32–0.36; TL 1.46–1.57.

Queen measurements (n=2). HL 0.50–0.56; HW 0.44–0.46; SL 0.26–0.30; ML 0.74–0.76; PrL 0.14–0.16; PrW 0.30–0.36; PetNL 0.14–0.16; PetW 0.26–0.30; PH 0.20; PL 0.14–0.18; T1W 0.40–0.42; TL 1.78–1.90.

Male measurements (n=3). HL 0.46–0.54; HW 0.54–0.52; SL 0.08–0.12; ML 0.80–0.90; PrL 0.06–0.10; PrW 0.32–0.40; PetNL 0.14–0.19; PetW 0.24–0.26; PH 0.14–0.20; PL 0.14–0.28; T1W 0.39–0.45; TL 1.87–2.06.

Worker description. Body pale yellow, matte. Body covered by deep and sparse punctulate sculpturing; head dorsum with interval between the punctures once or twice the diameter of a single puncture.

Head in full-face view slightly longer than broad; mandibles with basal teeth distinctly larger than the median ones; basal margins convex. In full-face view, clypeus slightly projected medially. Antennae with 11 segments; apical antennomeres separated by deep constrictions. Eyes paced at the head midheight.

In dorsal view, pronotum slightly broader than long. In profile, distance between the propodeal spiracle and the bulla of the metapleural gland corresponding to once the diameter of the spiracle; distance between the propodeal spiracle and the propodeal dorsum corresponding to twice the diameter of the spiracle.

In lateral view, petiolar node as long as high. Subpetiolar process with its anterior and posterior margin converging apically; posterior margin concave; posteroventral angle mainly obtuse.

Queen. Like conspecific workers, with the expected modifications for *Prionopelta* queens.

Male. In full-face view, anterior margin of clypeus projected medially; head dorsum with dense point-like sculpture, rendering the integument opaque. Distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to once the diameter of the spiracle; distance between the propodeal spiracles and the propodeal dorsum corresponding to almost twice the diameter of the spiracle.

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

Distribution. *Prionopelta punctulata* is known from northern Brazil to northwestern Argentina.

Comments. The species is easily distinguished from other Neotropical *Prionopelta* by its diagnostic characteristics.

The description of the genus is based on the characteristics of the queen, captured in southern Brazil (Paraná) and described by Mayr (1866) as *P. punctulata*. The first workers were found in Santa Catarina, and after their description, the specimens were associated with the queen in Mayr (1887). Nevertheless, Forel (1909) considered that those workers corresponded to a different species, which he named *Prionopelta mayri*. Posteriorly, an additional species from Argentina was described by Santschi (1923), namely *P. bruchi*.

Brown (1960) synonymized this last two names under *P. punctulata* arguing that the differences between them are negligible, probably due to a different viewing angle, interpretation and allometric variation.

Morphological descriptions of the male and worker larvae are provided by Forel (1893) and Wheeler (1952), respectively.

Natural history. Few is known of its biology. Field annotations of Mons. H.H. Smith are included in Forel (1983).

Smith describes *P. punctulata* as pretty common ants that can be found scattered in small passages in a number of five up to 50 individuals. The ants can form small groups of no more of four individuals with immature stages within the nested chambers, that may or may not be connected to each other. Individuals can be captured generally under sod in damp, shady and open places, near sea level, in soft rotten wood and forest edges.

Additional material examined (407 specimens). **ARGENTINA:** Tucumán: N. Kusnezov col. (1 male) [MZSP]; same data, CASENT0102503 (1 queen) [MHNG] (examined by images); same data, CASENT0172312 (1 queen) [ANIC]. **BRAZIL:** **Amazonas:** PDBFF, Cidade Powell, 02°38'69"S 59°87'49"W, 20.viii.2016, Fernandes col. (33 workers) [INPA]. **Bahia:** Sambaiba, 11.i.1996, Nascimento, J., col. (2 workers) [DZUP]. **Goiás:** Jataí, Faz. Lageado, 17°49'51"S 51°37'21"W, 856m, 19.ii.2009, G.G. dos Santos, Mini-Winkler (2 workers) [DZUP]. Faz. Leão, 17°48'23"S 51°41'45"W, 855m, 08.ii.2009, G.G. dos Santos col., Mini-Winkler (2 workers) [DZUP]; same data, 17°48'24"S 51°41'41"W, 861m, 21.ii.2009 (1 queen, 9 workers) [DZUP]. Faz. Río Paraíso, 17°44'6"S 51°34'30"W, 08.xi.2011, Diniz col., A3: Cerrado sensu stricto, Winkler (37 workers) [DZUP]; Faz. Sertãozinho, 17°55'10"S 51°45'32.7"W, 657m, 05.ii.2009, G.G. dos Santos col., Mini-Winkler, Pto. 13 (2 queens, 18 workers) [DZUP]; same data, #802, Pto. 19 (2 workers) [DZUP]; same data (3 workers) [DZUP]. Faz. Sta. Gertrudes, 17°50'07"S 51°43'04"W, 876m, 02.ii.2009, G.G. dos Santos col., Frag. 01, Mini-Winkler (1 queen) [DZUP]; same data, 17°50'10"S 51°43'09"W, 815m, 01.ii.2009 (1 queen, 20 workers) [DZUP]. Serranópolis, Faz. Bonito, 18°24'15"S 52°03'19"W, 687m, 12.iv.2009, G.G. dos Santos, *S. officinarum*, Mini-Winkler, Pto. 07 (50 workers) [DZUP]; **Mato Grosso do Sul:** Alcinópolis, P.N.M. Templo dos Pilares, Gruta da Lagoa, 03.xi. 2018, Silvestre, R. col., Winkler (1 queen, 1 worker) [UFGD]. Corumbá, 18°58'45"S 56°38'33"W, Reis Filho, W. *et al.* cols., (4 workers) [DZUP]. Faz. Nhimirim, 13-14.i.2016, Reis Filho, W. *et al.* cols. Área 3, Transecto 1, Pitfall 14 (2 workers) [DZUP]; same data, 18-20.vii.2016 (2 workers) [DZUP]. Porto Murtinho, Chaco Florestado, Faz. Patolá, 21°42'0.29"S 57°43'7.73"W, P.R. Souza, N. Rodrigues cols., Pitfall (1 worker) [UFGD]. **Minas Gerais:** Uberlândia, Reserva Ecológica Panga,

19°10.840S 48°23.852W, 825m, 10.ix.2014, Formigas do Brasil (1 worker) [DZUP]; same data, 19°10'02"S 48°23'37"W, 01.x.2002, Caué, T Lopes cols. (1 worker) [UFGD]. **Rondônia:** Vilhena - BER 5, C. Médio, Km 12, 14.viii.1995, A. Santos col., MPEG03006596 (3 workers) [MPEG]. **Santa Catarina:** 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]; same data, TSBF IT503 (2 workers) [DZUP]; same data, pitfall IP501 (1 worker) [DZUP]. São Bento do Sul, APA Rio Vermelho, 26°21'51"S 49°16'16"W, 30.iii-04.iv.2001, Silva, R.R. e Eberhardt, F. cols. (1 worker) [MZSP]. **São Paulo:** Agudos, 16.i.1955, W.W Kempf (1 queen) [MZSP]; same data, 02.xi.1953, #948 (2 males) [MZSP]; same data, 26.xi.1955, #1472 (2 workers) [MZSP]. Jucituba, 30.x.1960, W.W Kempf, #3622 (3 workers) [MZSP]. Mirassol, 09.ii.1972, J. Diniz col., #10795 (3 workers) [MZSP]. Fazenda B. Grande, 25.i.1975, Diniz, #733, sob tronco podre (4 workers) [DZUP]. Groto Parque, 23.ii.1977, Diniz, #1350, em tronco (2 workers) [DZUP]. Monte Aprazível, Fazenda Bacurí, 27.ii.1974, J. Diniz, #697 (2 workers) [DZUP]. Rio São José dos Dourados, 11.ii.1976, Diniz, #926, sob tronco podre (3 workers) [DZUP]. Parelheiro, 28.xii.1962 W.W Kempf, #5293 (1 worker) [MZSP]. **PARAGUAY: Canindeyú:** Reserva Natural del Bosque Mbaracayu, Jejuimi, -24.133333 -55.533333, 170m, 12.xi.2002, A.L. Wild col., AW1679, humid subtropical tal forest edge, under rotting wood, CASENT0173508 (1 male) [ALWC]; same data, CASENT0173507 (1 worker) [ALWC]; same data, CASENT0173506 (1 worker) [ALWC]. Salto del Guaira, 30.x.1979, F. Baud col., CASENT102505 (3 workers) [MHNG]; same data, CASENT102586 (3 workers) [MHNG].

***Prionopelta* sp. n. A**

Figures 20, 24

Holotype worker: BRAZIL: Bahia: São Desidério, Gruta do Catão, Epígeo, 03.xi.2012, SDes146, 285 (1 worker) [DZUP].

Paratypes. same data as holotype (2 workers) [DZUP].

Worker diagnosis. In full-face view, basal margins of mandibles slightly convex; clypeus slightly projected medially. Antennae with 11 segments; apical antennomeres separated by shallow constrictions. In lateral view, posteroventral angle of the subpetiolar process obtuse.

Holotype measurements. HL 0.56; HW 0.50; SL 0.28; ML 0.64; PrL 0.27; PrW 0.32; PetNL 0.20; PetW 0.30; PH 0.22; PL 0.22; T1W 0.45; TL 1.85.

Worker measurements (n=3). HL 0.52–0.56; HW 0.46–0.50; SL 0.28–0.30; ML 0.64–0.68; PrL 0.24–0.27; PrW 0.32–0.34; PetNL 0.14–0.20; PetW 0.28–0.30; PH 0.22–0.36; PL 0.16–0.22; T1W 0.42–0.48; TL 1.72–1.92.

Worker description. Body dark yellow. Integument covered by deep and sparse punctulate sculpturing; head dorsum with interval between the punctures once the diameter of each puncture.

Head, in full-face view, as long as broad; mandibles with basal teeth distinctly larger than the median one; basal margin convex. In full-face view, clypeus evenly

rounded. Antennae with 11 segments; apical antennomeres separated by deep constrictions. Eyes placed at the head midheight.

In dorsal view, pronotum slightly broader than long. In profile, distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to once the diameter of the spiracle; distance between the propodeal spiracles and the propodeal dorsum corresponding to thrice the diameter of the spiracle.

In lateral view, petiolar node slightly higher than long. Subpetiolar process with its anterior and posterior margins parallel; posterior margin concave; posteroventral angle obtuse.

Queen. Unknown.

Male. Unknown.

Distribution. The species is known from northeastern and southeastern Brazil, at the states of Bahia, Ceará, and Minas Gerais.

Comments. The species is quite similar to *P. sp. n. B*, but can be distinguished mainly by the obtuse posteroventral angle of its subpetiolar process. Also, the contour of head in *P. sp. n. A* is slightly subquadrate, while in *P. sp. n. B* it is subrectangular.

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

Additional material examined (5 specimens). BRAZIL: Bahia: Salvador, vii e x.2012, Melo T.S. col., #5703, 446 (2 workers) [CPDC]. **Ceará:** Cratús, São Luis, 05°, 08'S 40°51'W, 20-30.iv.2003, Y. Quinet col., Mata seca, Pitfall traps, (1 worker) [MZSP]. **Minas Gerais:** Manga, Parque Estadual da Mata Seca, 26.ix.2008, Marques, T. & estagiários cols., Parcela 07, Arm. 3, Estrato sub., UFV LABECOL n°000115 (1 worker) [UFVB].

Prionopelta sp. n. B

Figures 21–22, 25

Holotype worker: MEXICO: Jalisco: Tamazula de Gordiano, Cerro de la Mesa, 19°41'21"N 103°15'19"O, 1442m, Hojarasca, BTC M. Vasquez-Bolaños col. (1 worker) [DZUP]

Paratype. same data as holotype (1 worker) [DZUP].

Diagnosis. In full-face view, basal margins of mandibles straight; clypeus evenly rounded; antennae with 11 segments; apical antennomeres separated by deep constrictions. In lateral view, posteroventral angle of the subpetiolar process acute.

Holotype measurements. HL 0.5; HW 0.24; SL 0.28; ML 0.55; PrL 0.26; PrW 0.3; PetNL 0.22; PetW 0.22; PH 0.18; PL 0.14; T1W 0.34; TL 1.61.

Worker measurements (n=2). HL 0.50–0.56; HW 0.24–0.26; SL 0.28–0.30; ML 0.55–0.62; PrL 0.26–0.27; PrW 0.28–0.30; PetNL 0.17–0.22; PetW 0.22–0.25; PH 0.18–0.20; PL 0.14–0.17; T1W 0.34–0.37; TL 1.61–1.72.

Queen measurements (n=1). HL 0.56; HW 0.48; SL 0.34; ML 0.75; PrL 0.18; PrW 0.38; PetNL 0.14; PetW 0.3; PH 0.18; PL 0.15; T1W 0.45; TL 1.9.

Worker description. Body dark yellow. Integument covered by deep and dense punctulate sculpturing; head dorsum with interval between the punctures less than once the diameter of each puncture.

Head, in full-face view longer than broad; mandibles with basal teeth distinctly larger than the median one; basal margins straight. In full-face view, clypeus evenly rounded anteriorly. Antennae with 11 segments; apical antennomeres separated by deep constrictions. Eyes placed immediately after the head midheight.

In dorsal view, pronotum slightly broader than long. In profile, distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to once the diameter of the spiracle; distance between the propodeal spiracles and the propodeal dorsum corresponding to twice the diameter of the spiracle.

In lateral view, petiolar node as long as high. Subpetiolar process with its anterior and posterior margins parallel; posterior margin concave; posteroventral angle acute.

Queen. Like conspecific workers, with the expected modifications for *Prionopelta* queens.

Male. Unknown.

Distribution. *Prionopelta* sp. n. B is only known from western Mexico.

Comments. Among the Neotropical *Prionopelta* with 11 antennal segments, this species is different from *P. punctulata* by the shape of clypeus and the basal margins of mandibles and from *P. sp. n. A* by the presence of a discrete projection of the cuticle in the posteroventral angle of the subpetiolar process. One specimen showed ocellar vestiges.

Natural history. The species is mainly known from leaf litter samples collected in disturbed areas, at elevations greater than 1000m.

Additional material examined (2 specimens). **MEXICO: Jalisco:** 14km SW de Hostotipaquillo, 21.012°N 104.179°W, 990m, 4-10.viii.2013, G. Melo & B.B. Rosa cols. (1 queen) [DZUP]; same data, 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) [JTLC].

Prionopelta sp. n. C

Figures 23, 27

Holotype worker. **BRASIL: Amazonas:** Manaus, Reserva Florestal Adolpho Ducke, 02°58'893"S 059°57'677"W, Ipiranga T2 3/400, 07.xii.2005, TEAM project. (1 worker) [INPA].

Paratypes. Same data as holotype, T1 1/500 (2 workers) [DZUP].

Diagnosis. Small-sized ants (TL ≤ 1.5 mm). In full-face view, malar area deeply sculptured with interval between the punctures of malar area inconspicuous; antennae with 12 segments. In lateral view, subpetiolar process with its posterior margin straight.

Holotype measurements. HL 0.42; HW 0.36; SL 0.30; ML 0.49; PrL 0.11; PrW 0.23; PetNL 0.12; PetW 0.18; PH 0.12; PL 0.11; T1W 0.30; TL 1.33.

Worker measurements (n=2). HL 0.42–0.44; HW 0.36–0.38; SL 0.25–0.30; ML 0.49–0.55; PrL 0.11–0.20; PrW 0.23–0.24; PetNL 0.11–0.12; PetW 0.12–0.18; PH 0.12–0.16; PL 0.11; T1W 0.30; TL 1.33–1.40.

Worker description. Body light yellow. Integument covered by deep and dense punctulate sculpturing; head dorsum with interval between the punctures less than once the diameter of each puncture.

Head, in full-face view longer than broad; mandibles with basal teeth distinctly larger than the median one; basal margin slightly convex. In full-face view, clypeus evenly rounded. Antennae with 12 segments; apical antennomeres separated by deep constrictions. Eyes placed immediately after the head midheight.

In dorsal view, pronotum slightly broader than long. In profile, distance between the propodeal spiracles and the bulla of the metapleural gland corresponding to once the diameter of the spiracle; distance between the propodeal spiracles and the propodeal dorsum corresponding to almost twice the diameter of the spiracle.

In lateral view, petiolar node as long as high. Subpetiolar process with its anterior and posterior margins slightly converging apically; posterior margin straight; posteroventral angle obtuse or acute.

Queen. Unknown.

Male. Unknown.

Distribution. *Prionopelta* sp. n. C is known from southwestern Colombia and northern Brazil.

Comments. This species is commonly confused with *P. modesta* since both have a deep and dense punctulate sculpture in the head dorsum; although in *P. sp. n. C* the interval between the individual punctures is fairly inconspicuous. *Prionopelta* sp. n. C is different from other Neotropical members of the genus because of the straight posterior margin of the subpetiolar process and a body length lesser than 1.50 mm.

Natural history. The species is mainly known from leaf litter and dead wood samples collected in well preserved forests.

Additional material examined (230 specimens). BRASIL: Amazonas: Lg. Marianill V 24 Km, NE of Manaus, ix.1962, W.L. Brown col., #4566, Coleção Kempf (3 workers) [MZSP]. Manaquiri, xi.2009, Winkler (146 workers) [INPA]. Manaus, 10.xi.1993, A.B. Casimiro col., Rs. 1202 (9 workers) [INPA]; same data 14.xii.1993, #4832, Rs. 1301 (6 workers) [INPA]; same data, 2°5'86"S 60°6'55"W, 20.x.2004, Baccaro e col. (2 workers) [INPA]; same data, 21.x.2004 (4 workers) [INPA]; same data, 23.i.1994, AB Casimiro, #4832, Rs. 3114 (8 workers) [DZUP]; ZF3 Km 24, Faz. Esteio, 16.v.1985, WWF Ant Survey, Litter 14, Res. 1401 (2 workers) [INPA]. ZF3 Km 41, 59°48'W 2°25'S, 20.ix.1996, A.C. Maicedo e outros cols., #1682; *Prionopelta modesta* Forel, 1909 det. H. Vasconcelos [INPA]. Fazenda Experimental da UFAM, 2°39'17.4"S 60°03'31"W, 18 e 20.ix.2018, Almeida R.P.S. col., Ninho em tronco em decomp.: *Fulakora*, *Talaridris* (2 workers) [MPEG]; Reserva Florestal Adolpho Ducke, -2.93333 -59.95, 152m, 03.viii.2006, J. Souza & P. Oliveira cols., ANTC10226, Pitfall 8, PPBIO Grid, L-O 03, *P. punctulata* J. Souza det., CASENT0179474 (1 worker) [CASC] (examined by images);

same data, 2°55'43"S 59°56'46"W, 08.viii.2004, Baccaro & col., (5 workers) [INPA]; same data, 2°58'45"S 59°55'13"W, 24.i.2005, Baccaro & col., (4 workers) [INPA]; same data, 2°5'86"S 60°6'55"W, 24.i.2005, Baccaro & col., Winkler 4, TEAM Igarapé Ipiranga, 1m² liteira (1 worker) [INPA]; same data, 02°58'893"S 059°57'677"W, 07.xii.2005, TEAM project, Ipiranga (4 workers) [INPA]; same data, 15.ii.2007 (2 workers) [INPA]; same data, 29.xi.2006, Ipiranga (6 workers) [INPA]; same data, NE do Manaus, 04.ix.1962, W.L. Brown Jr. col., M-169, Coll. Kempf N. 4570 (10 workers) [MPEG]. **COLOMBIA: Nariño:** Barbacoas, 01°21'49"N 78°04'45"W, 640m, 25-27.vii.2006, A. Miranda & O. Reyes cols., Winkler (8 workers) [DZUP]. Territorio Kofán, 00°30'N 77°13'W, 1430m, 25.ix.1998, E. González leg., Winkler T2, 191 (2 workers) [CPDC].

PLATES

High resolution photos and scanning
electron microscopy images

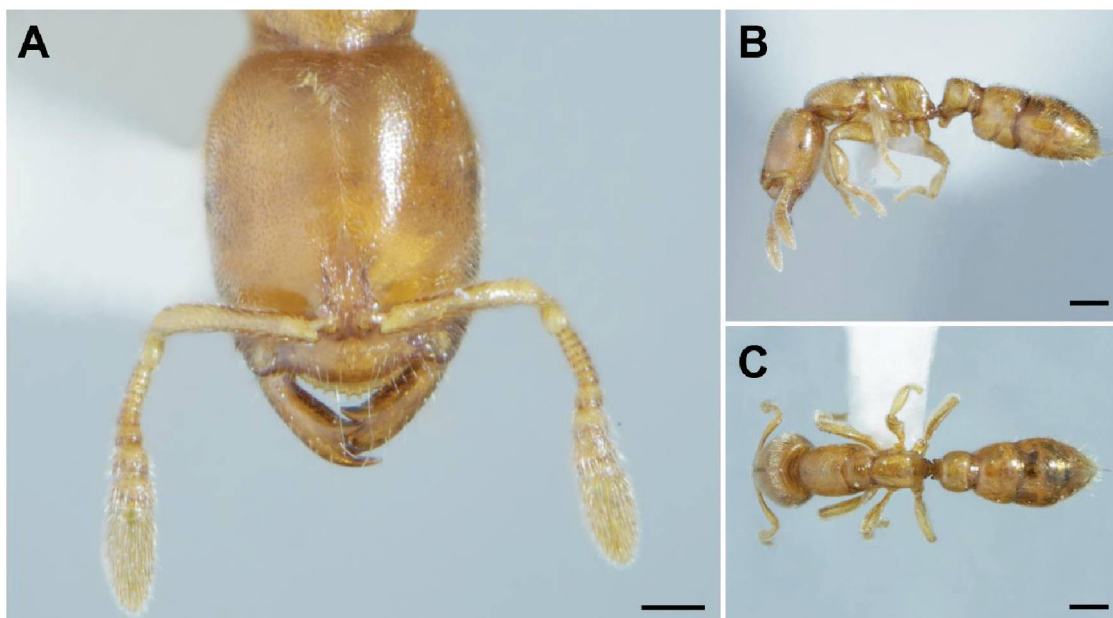


FIGURE 2. Worker of *Prionopelta amabilis* (Brazil, Bahia). A. full-face view; B. lateral view, C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

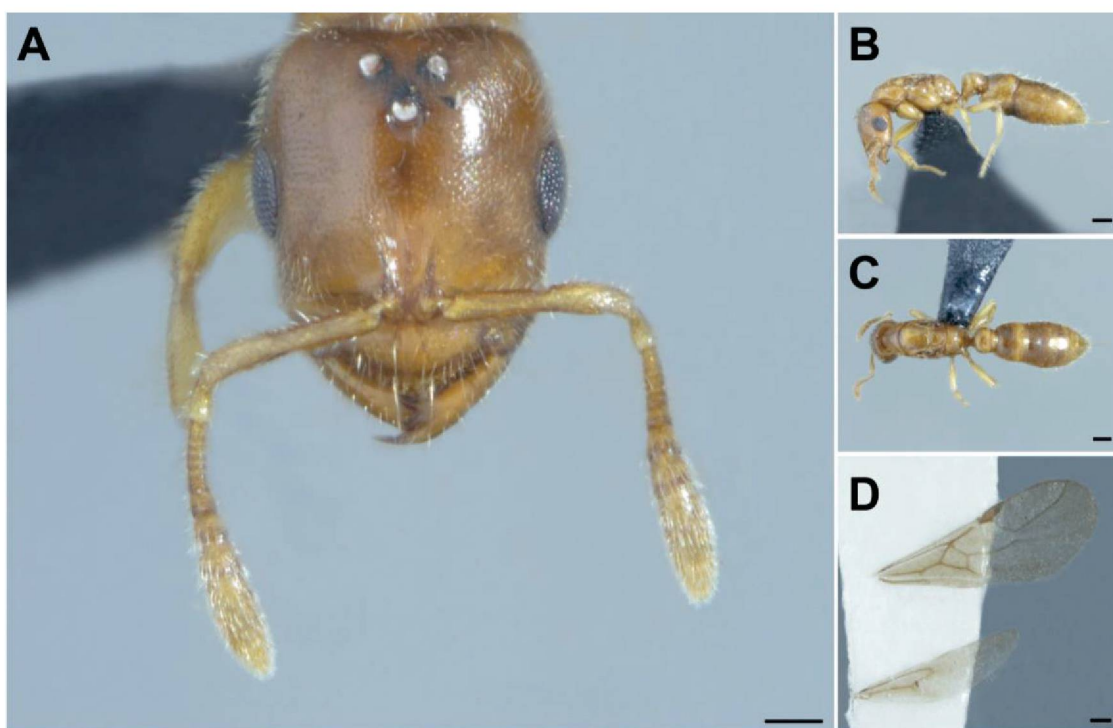


FIGURE 3. Queen of *Prionopelta amabilis* (Costa Rica, Península de Osa). A. full-face view; B. lateral view; C. dorsal view; D. wings. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

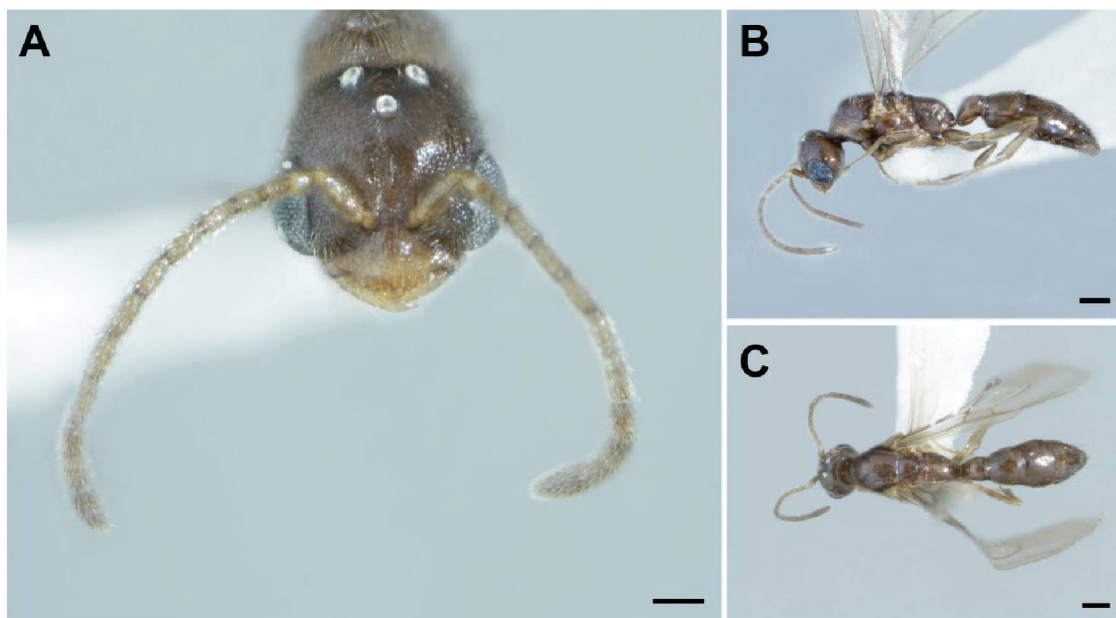


FIGURE 4. Male of *Prionopelta amabilis* (Brazil, Bahia). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

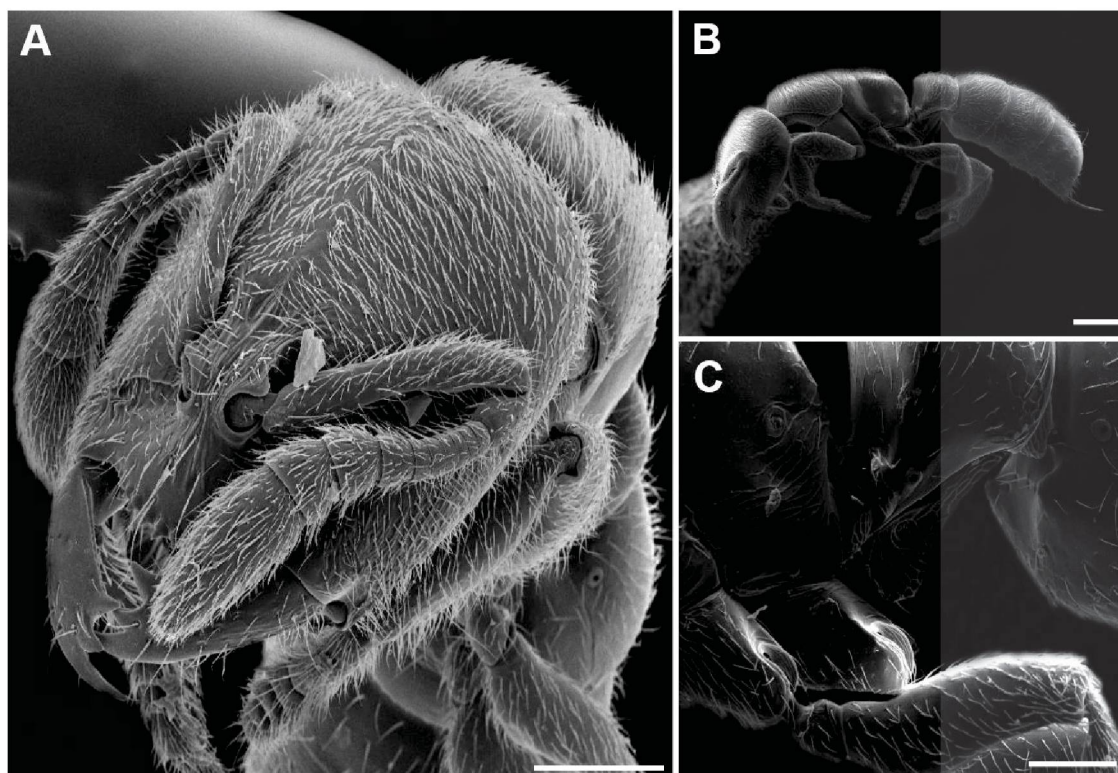


FIGURE 5. Worker of *P. amabilis* (Perú, Cuzco). A. Head dorsum, note the sculpturing, pubescence and detail of median tooth of mandibles; B. Habitus; C. Detail of subpetiolar process. Scale bars: A, C=100 µm, B= 200 µm.

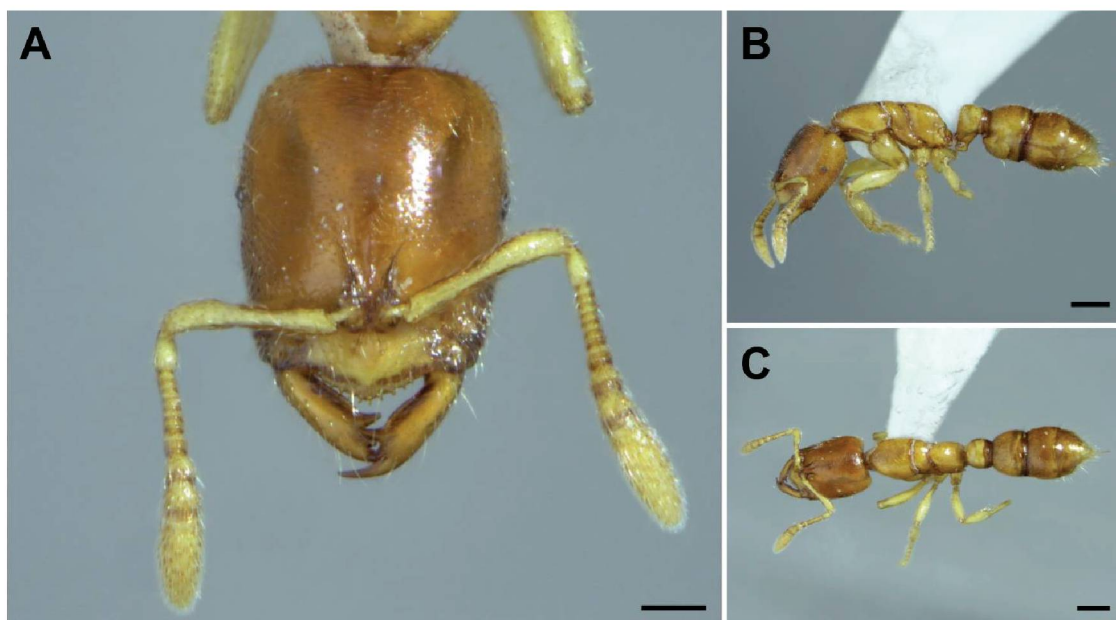


FIGURE 6. Worker of *Prionopelta antillana* (Nicaragua, Matagalpa). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

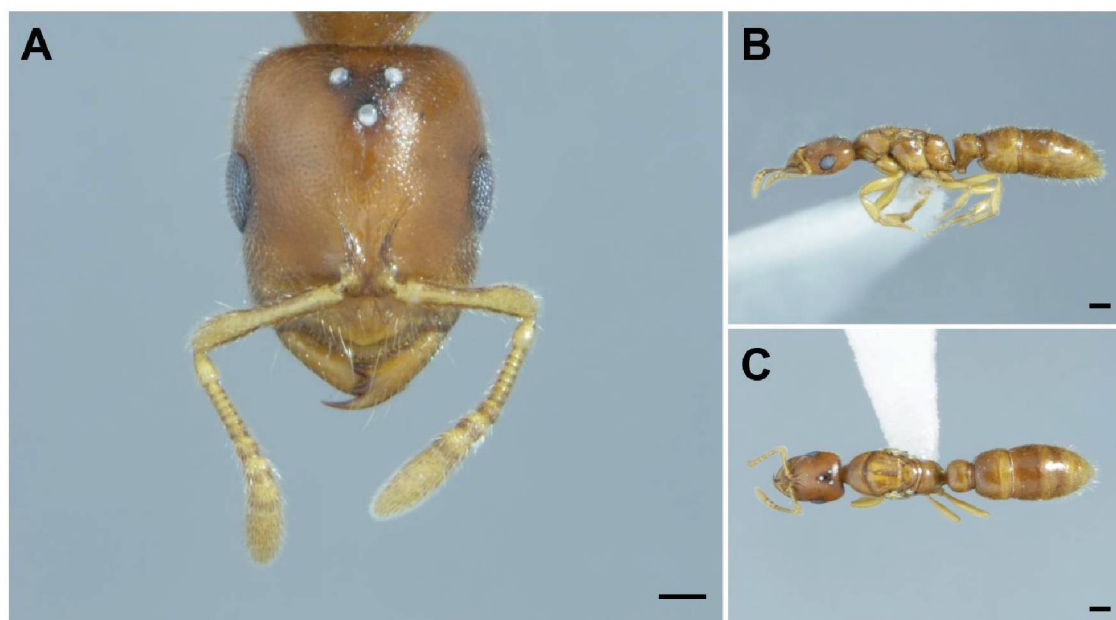


FIGURE 7. Queen of *Prionopelta antillana* (Honduras, Gracias a Dios). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

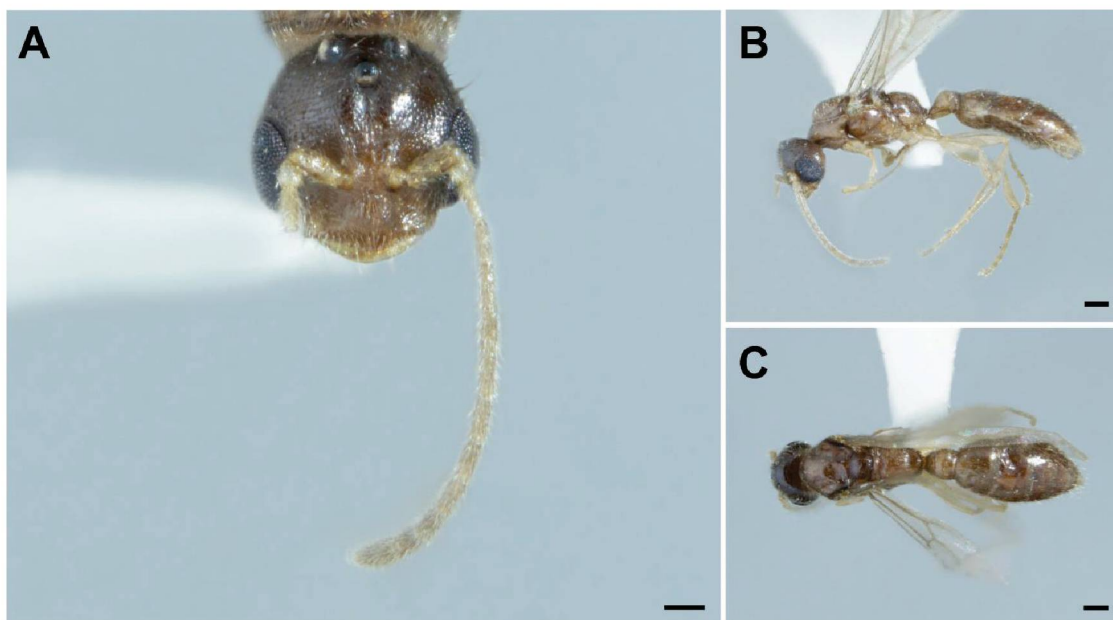


FIGURE 8. Male of *Prionopelta antillana* (Brazil, Bahia). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

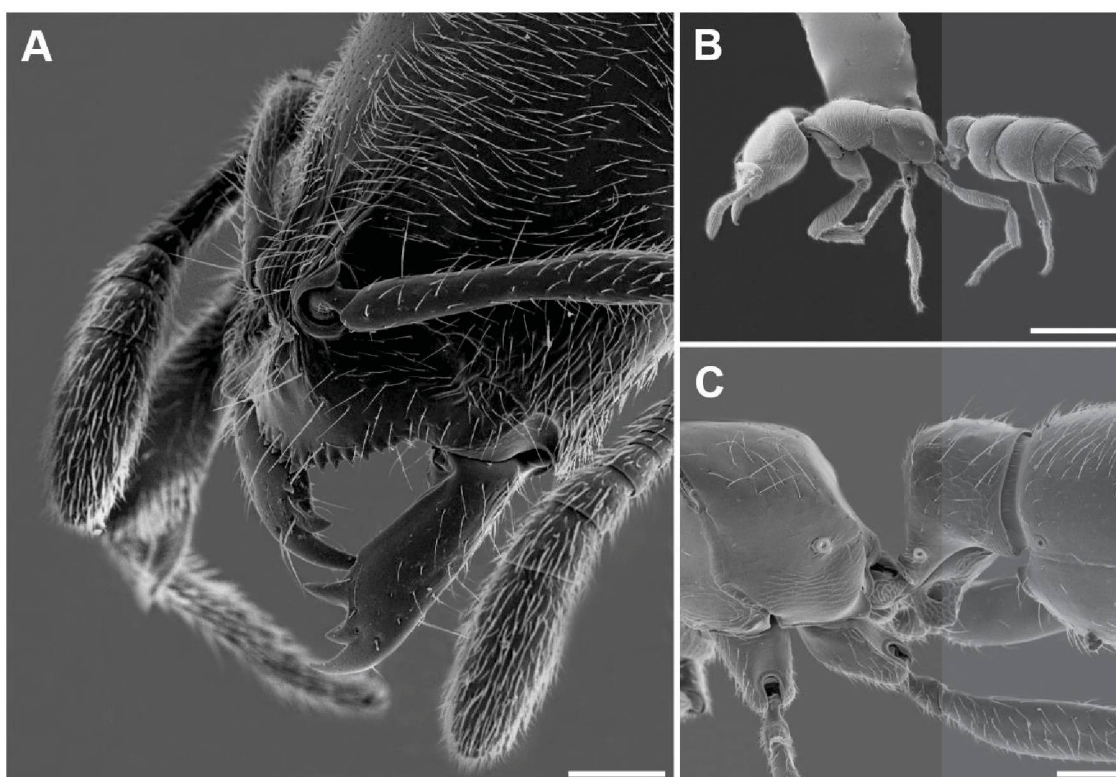


FIGURE 9. Worker of *P. antillana* (Colombia, Meta). A. Head dorsum, note the sculpturing, pubescence and detail of median tooth of mandibles; B. Habitus; C. Detail of subpetiolar process. Scale bars: A, C=100 μ m, B= 500 μ m.

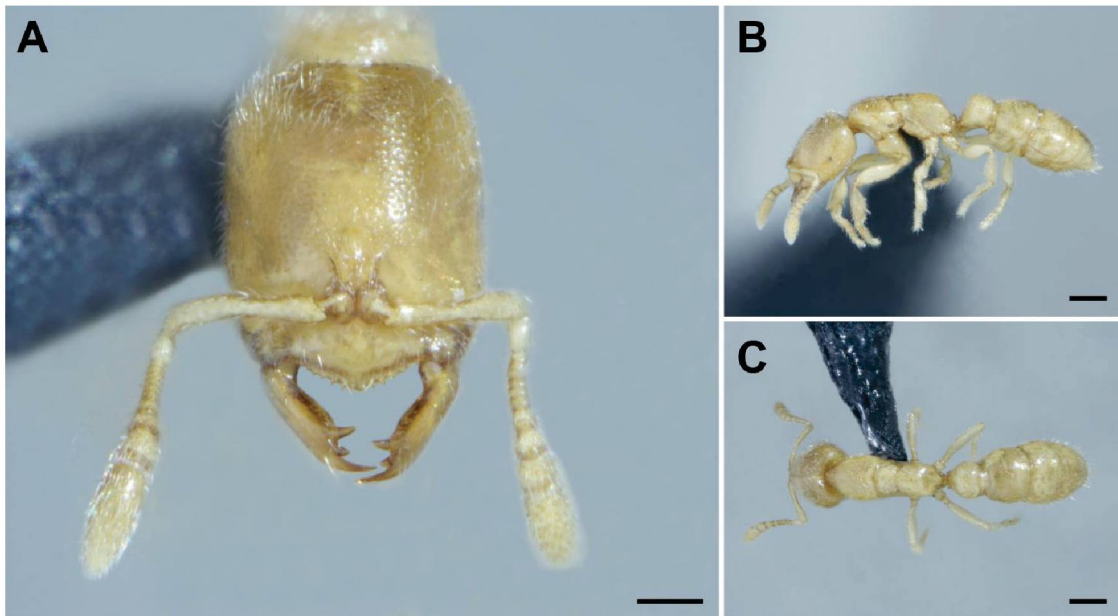


FIGURE 10. Worker of *Prionopelta marthae* (Venezuela, Aragua). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

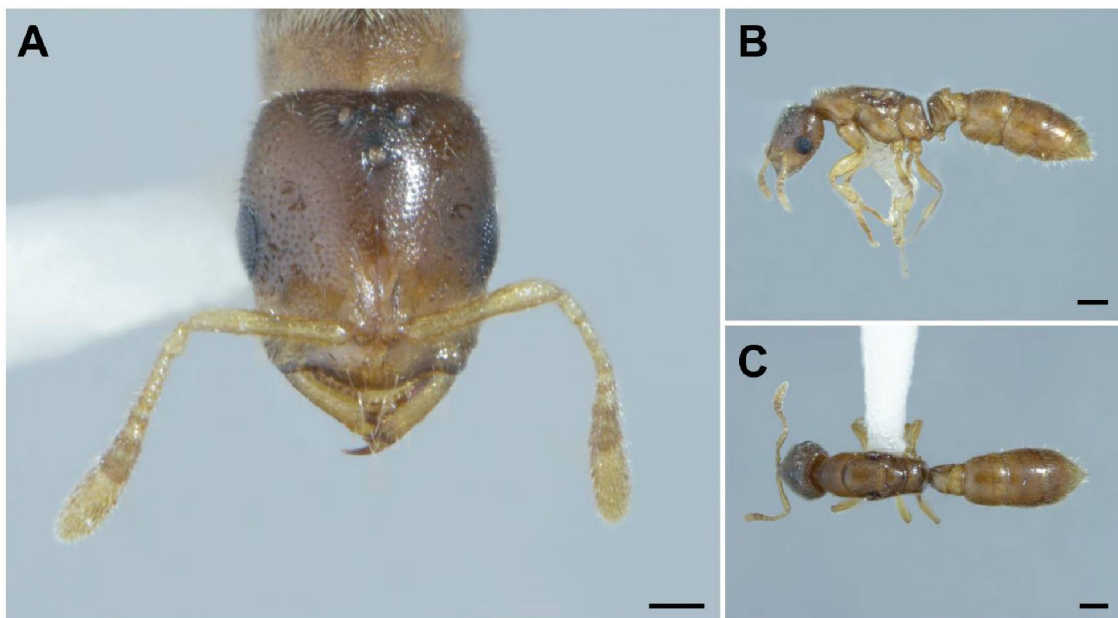


FIGURE 11. Queen of *Prionopelta marthae* (Brazil, Goiás). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

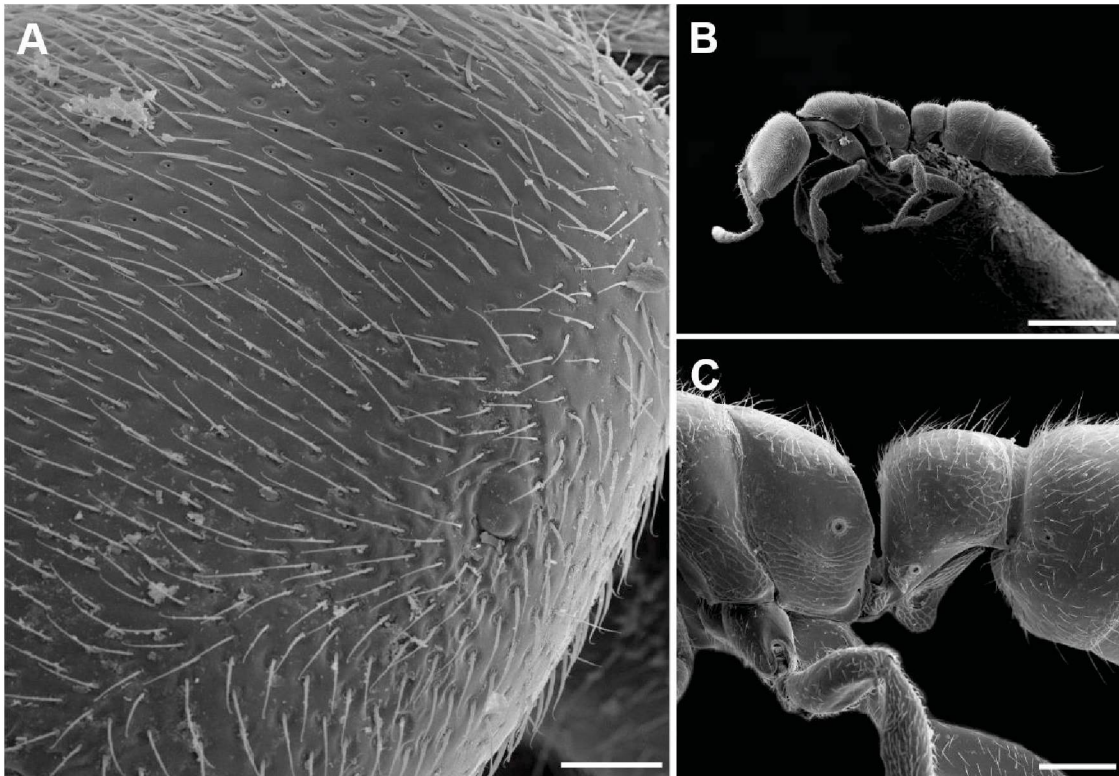


FIGURE 12. Worker of *P. marthae* (Ecuador, Zamora-Chinchipe). A. Head dorsum, note the sculpturing and detail of malar area; B. Habitus; C. Detail of subpetiolar process. Scale bars: A=50 μ m, B= 500 μ m, C= 100 μ m.

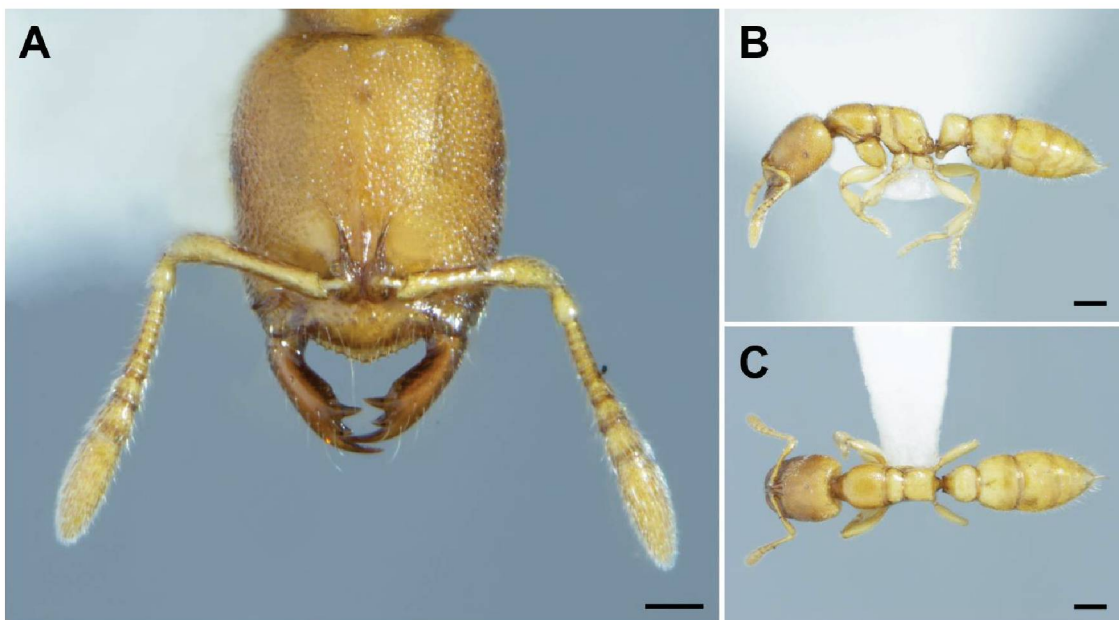


FIGURE 13. Worker of *Prionopelta modesta* (Costa Rica, Limón). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

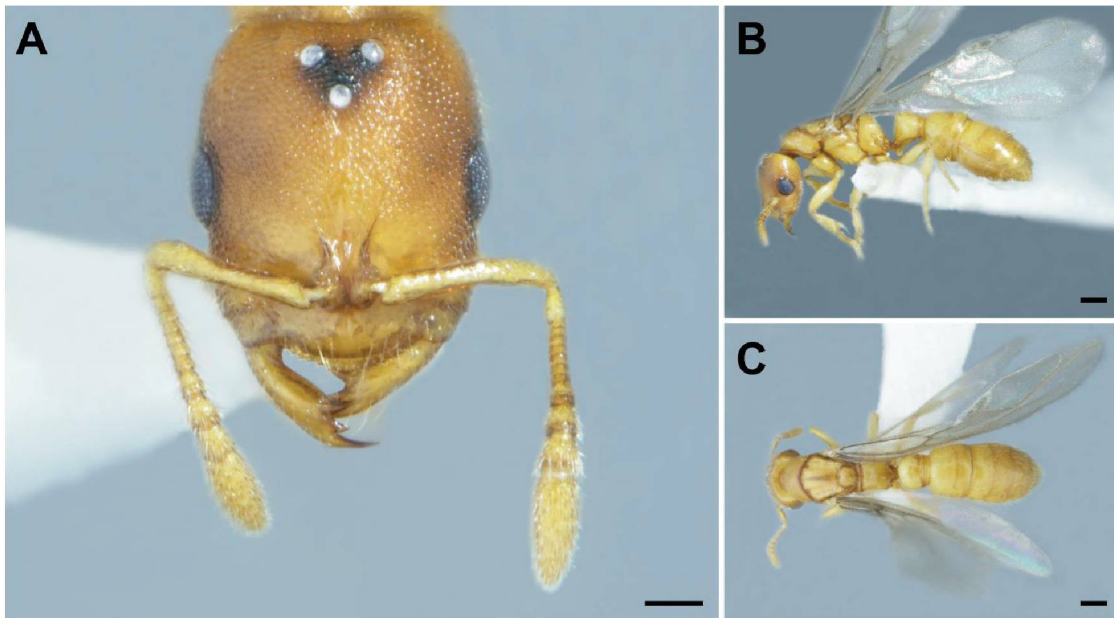


FIGURE 14. Queen of *Prionopelta modesta* (Mexico, Oaxaca). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

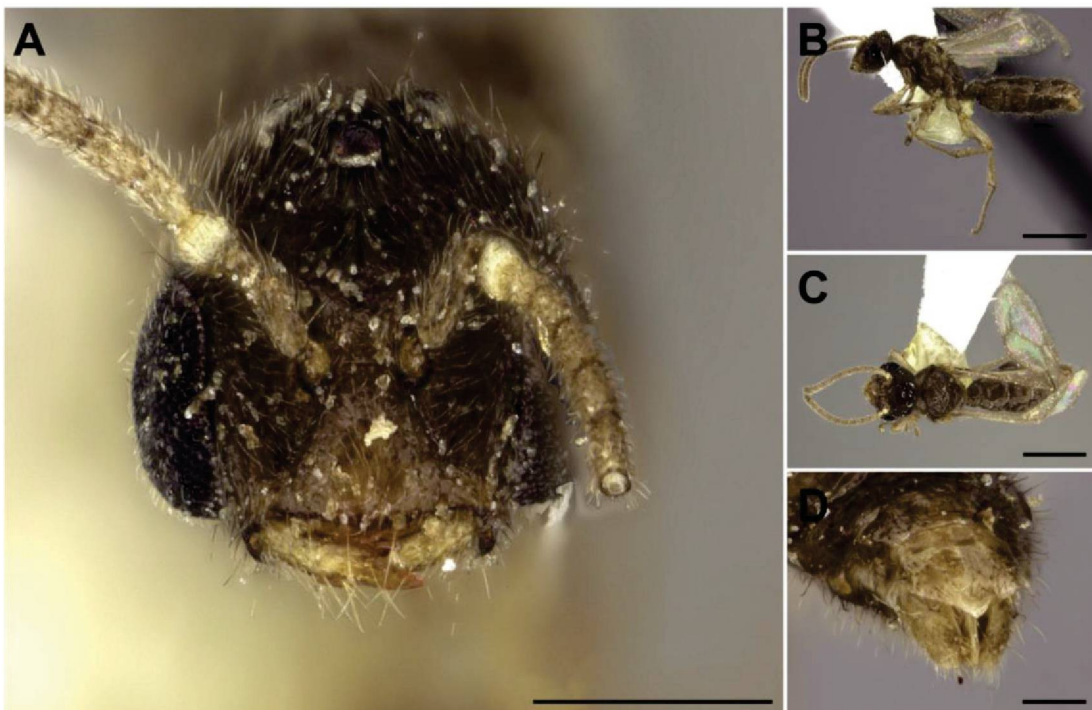


FIGURE 15. Male of *Prionopelta modesta* (Honduras, Comayagua). A. full-face view; B. lateral view; C. dorsal view, D. external genitalia. Images by Will Ericson, Specimen: CASENT0615793. Scale bars: A= 0.2mm; B, C= 0.5mm; D= 0.1mm. Source: AntWeb.

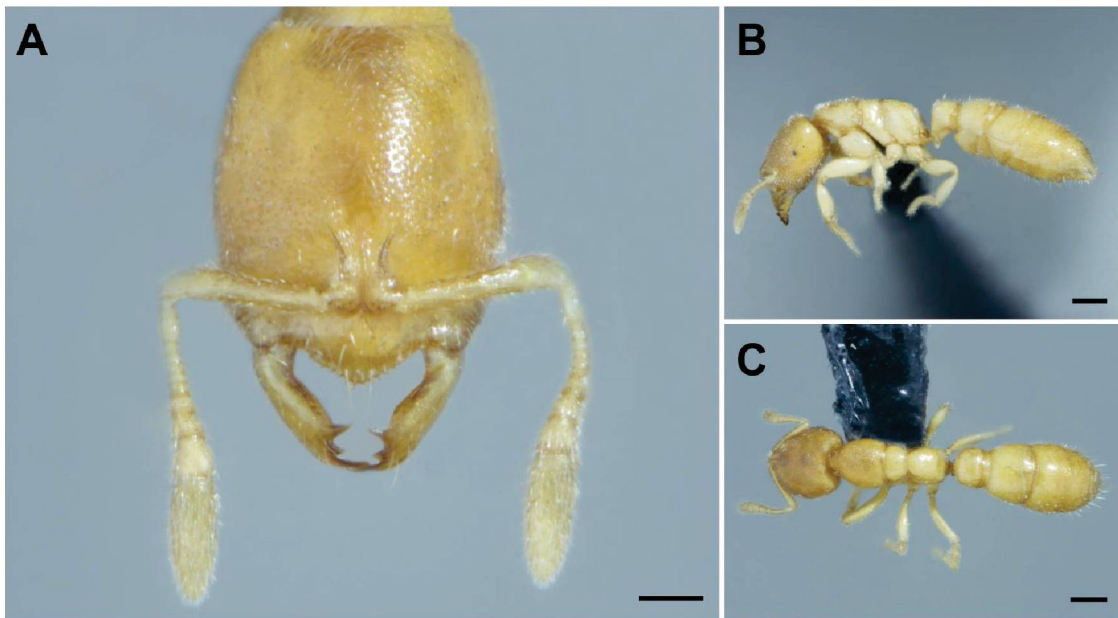


FIGURE 16. Worker of *Prionopelta punctulata* (Brazil, Amazonas). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

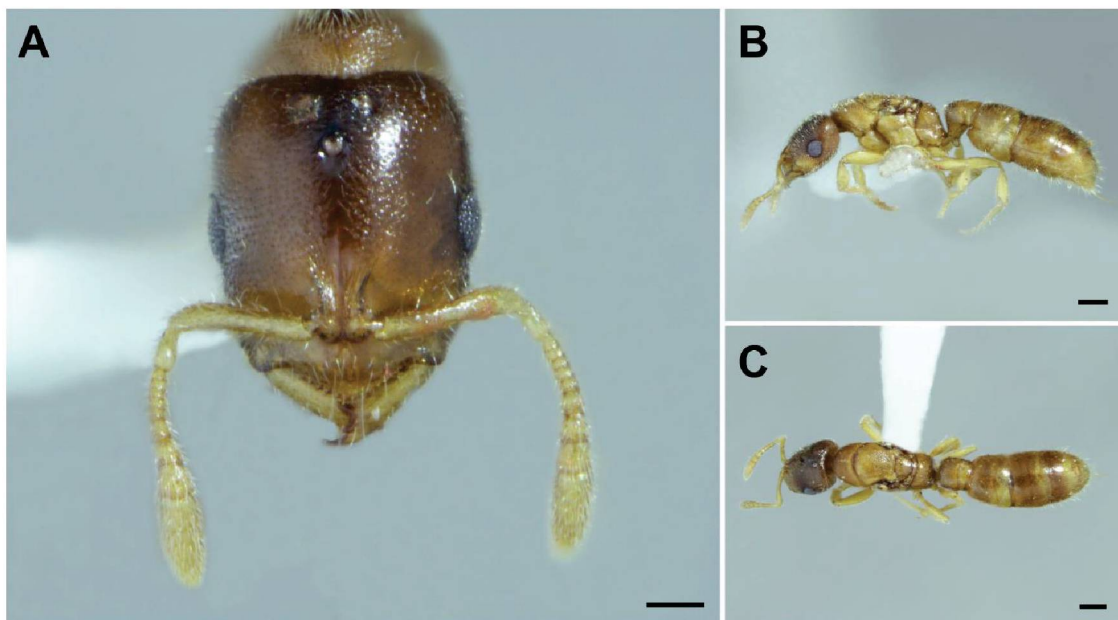


FIGURE 17. Queen of *Prionopelta punctulata* (Brazil, Goiás). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

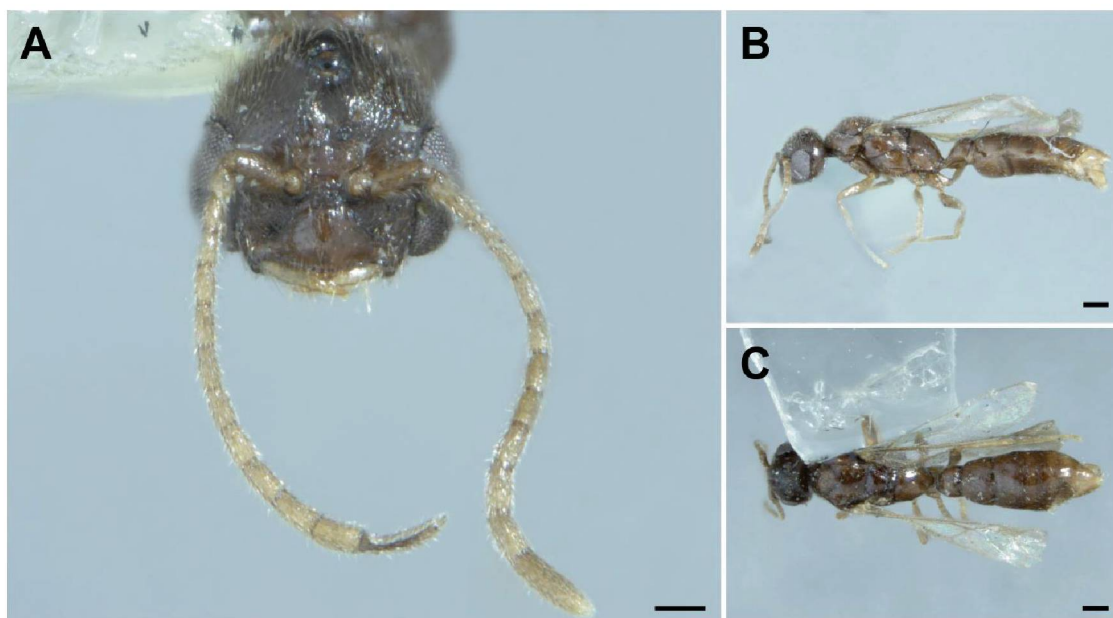


FIGURE 18. Male of *Prionopelta punctulata* (Argentina, Tucumán). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

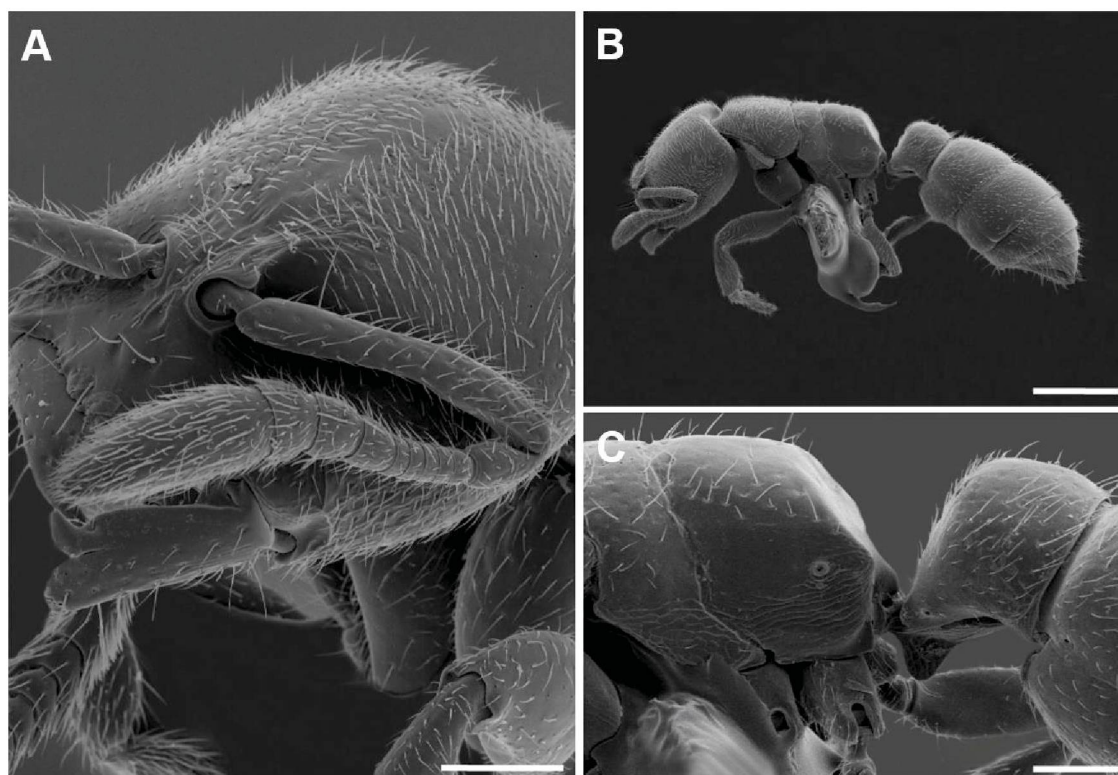


FIGURE 19. Worker of *P. punctulata* (Brazil, Goiás). A. Head dorsum, note the number of antennal segments and shape of clypeus, B. Habitus, C. Detail of subpetiolar process. Scale bars: A, C 100 μ m, B= 200 μ m.

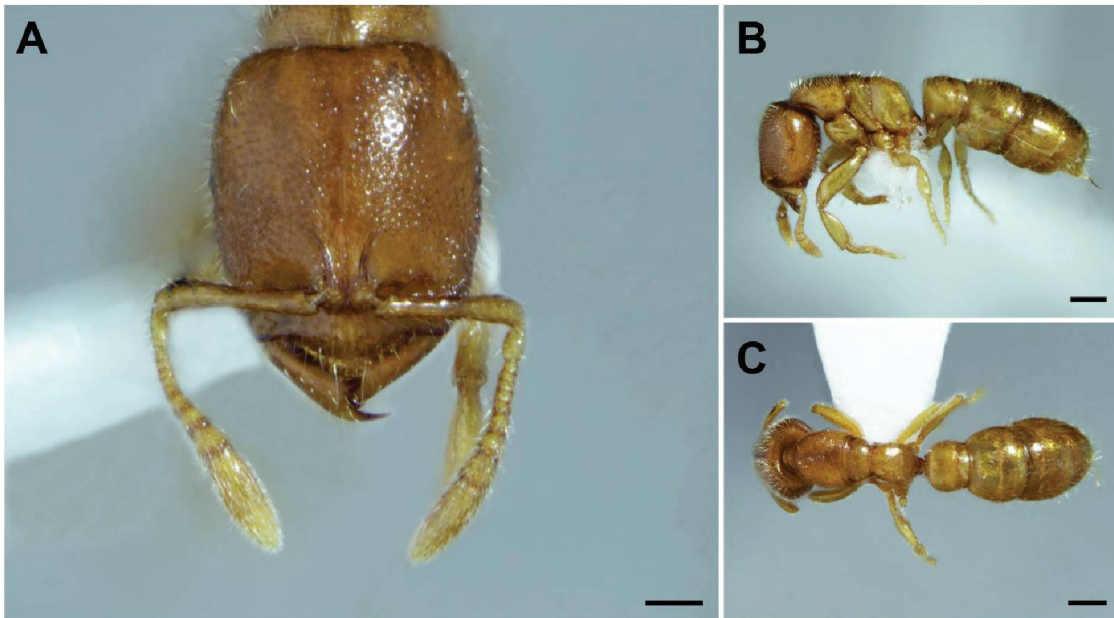


FIGURE 20. Worker of *Prionopelta* sp. n. A (Brazil, Bahia). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

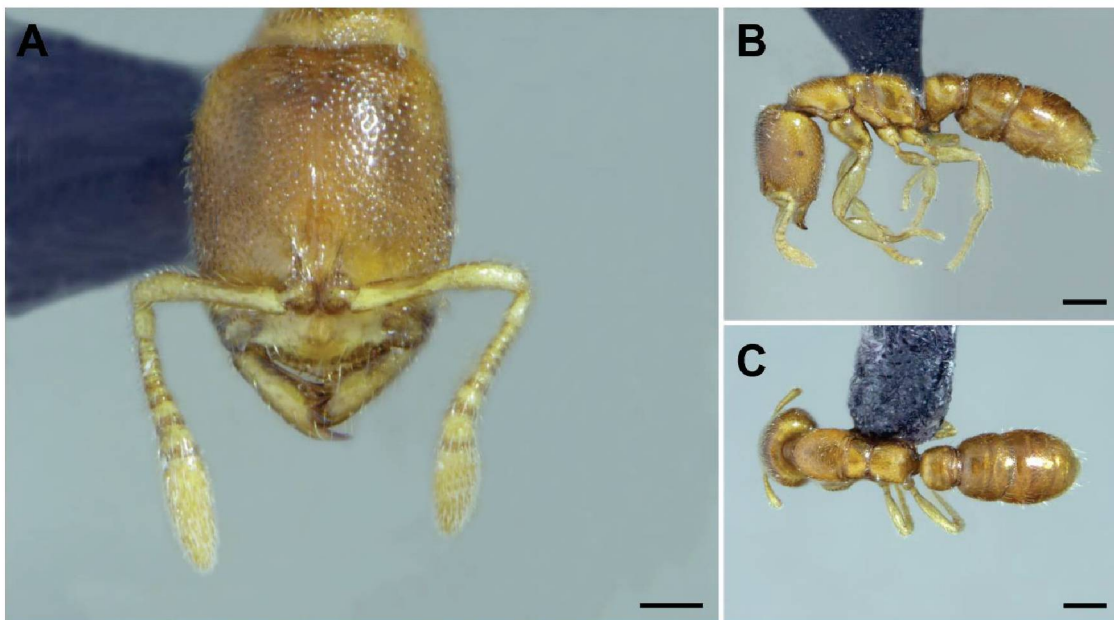


FIGURE 21. Worker of *Prionopelta* sp. n. B (Mexico, Jalisco). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

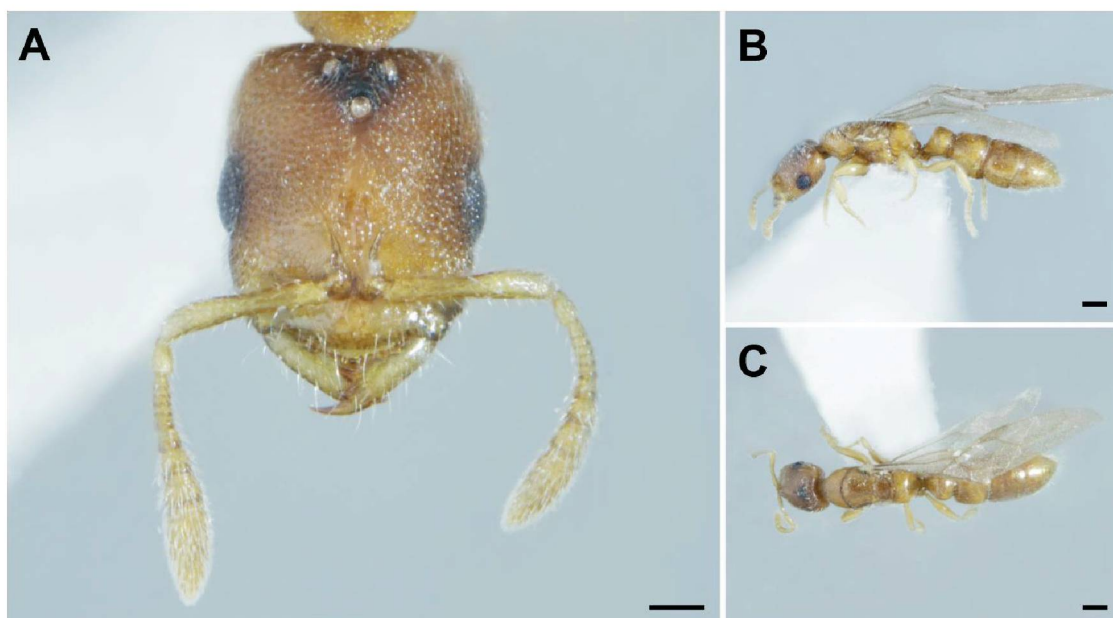


FIGURE 22. Queen of *Prionopelta* sp. n. B (Mexico, Jalisco). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

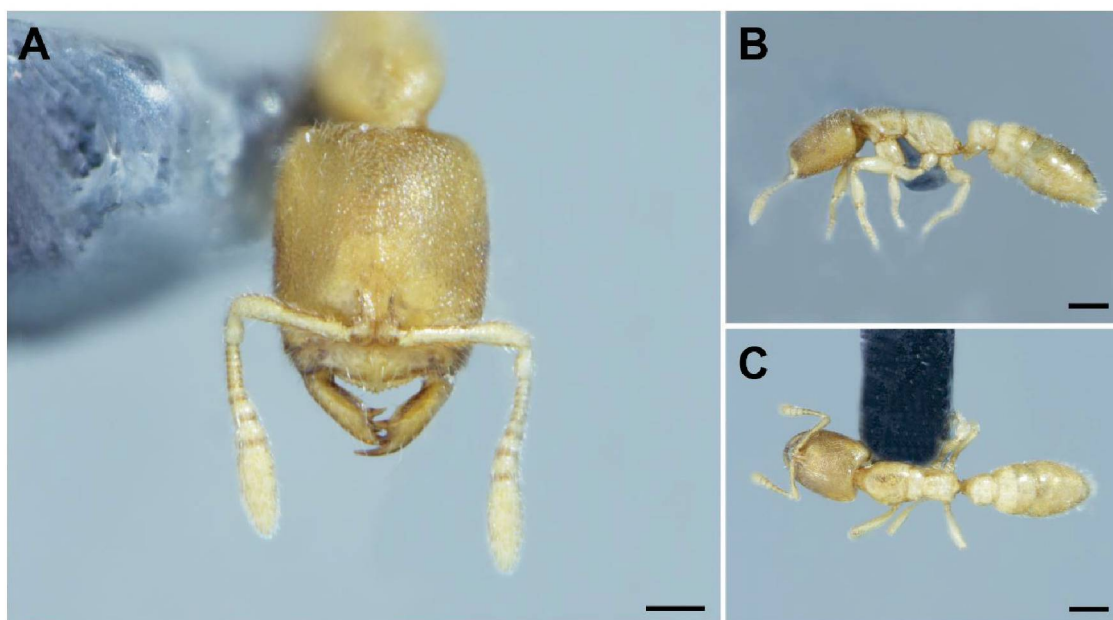


FIGURE 23. Worker of *Prionopelta* sp. n. C (Brazil, Amazonas). A. full-face view; B. lateral view; C. dorsal view. Images by Natalia Ladino. Scale bars: A= 0.1mm; B, C= 0.2mm.

DISTRIBUTION MAPS

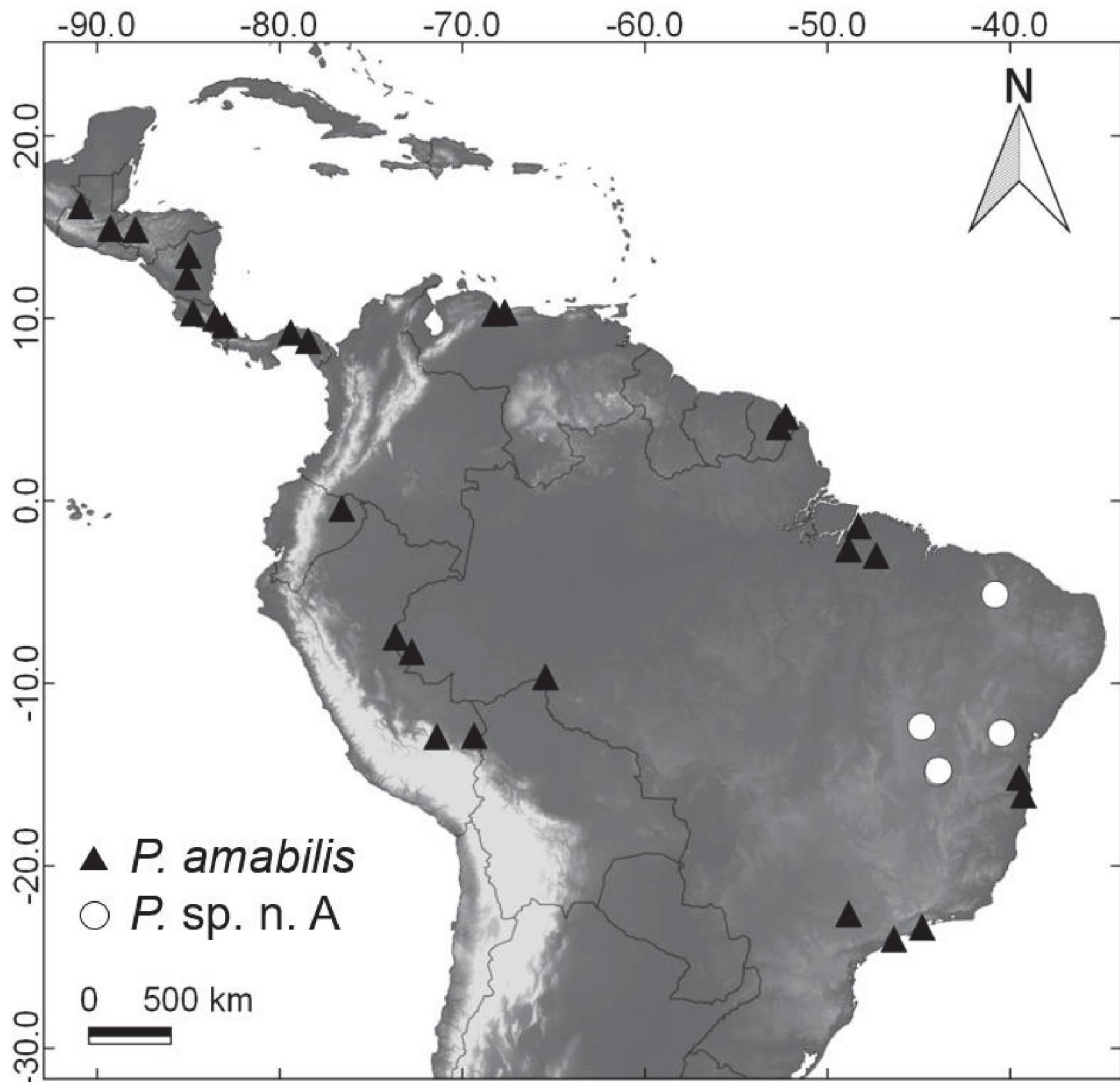


FIGURE 24. Distribution maps for *P. amabilis* and *P. sp. n. A*.

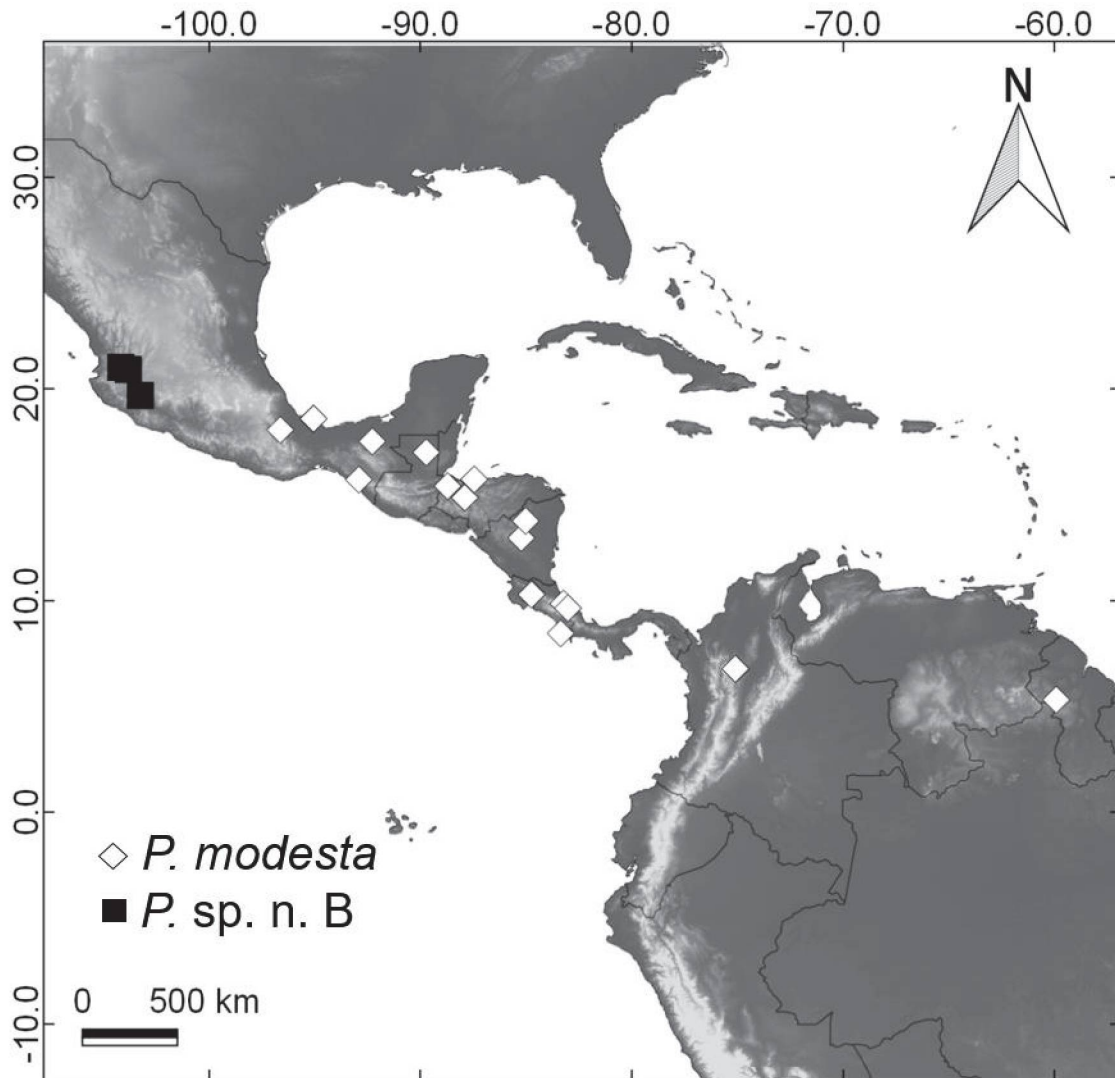


FIGURE 25. Distribution maps for *P. modesta* and *P. sp. n. B*.

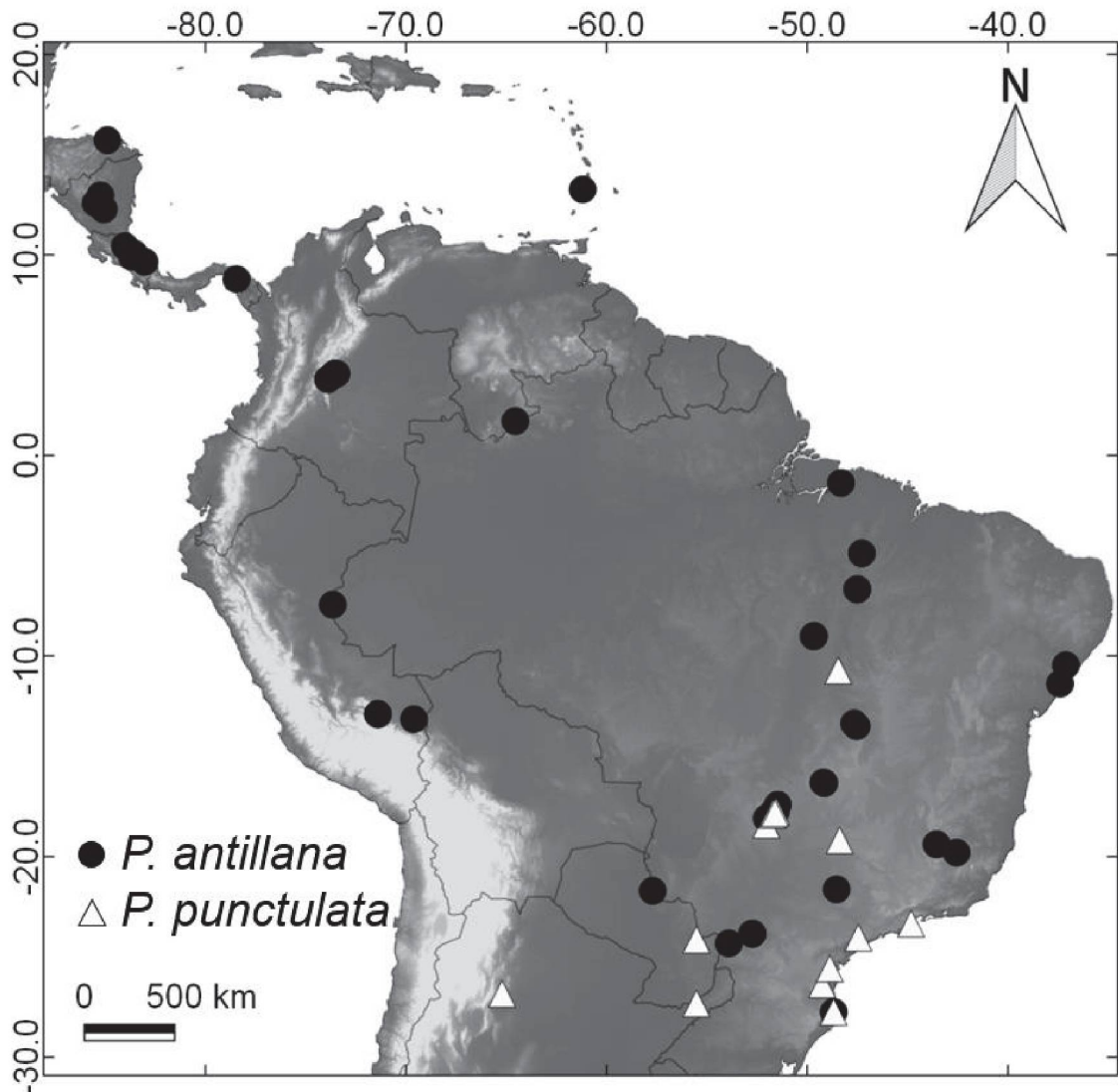


FIGURE 26. Distribution maps for *P. antillana* and *P. punctulata*.

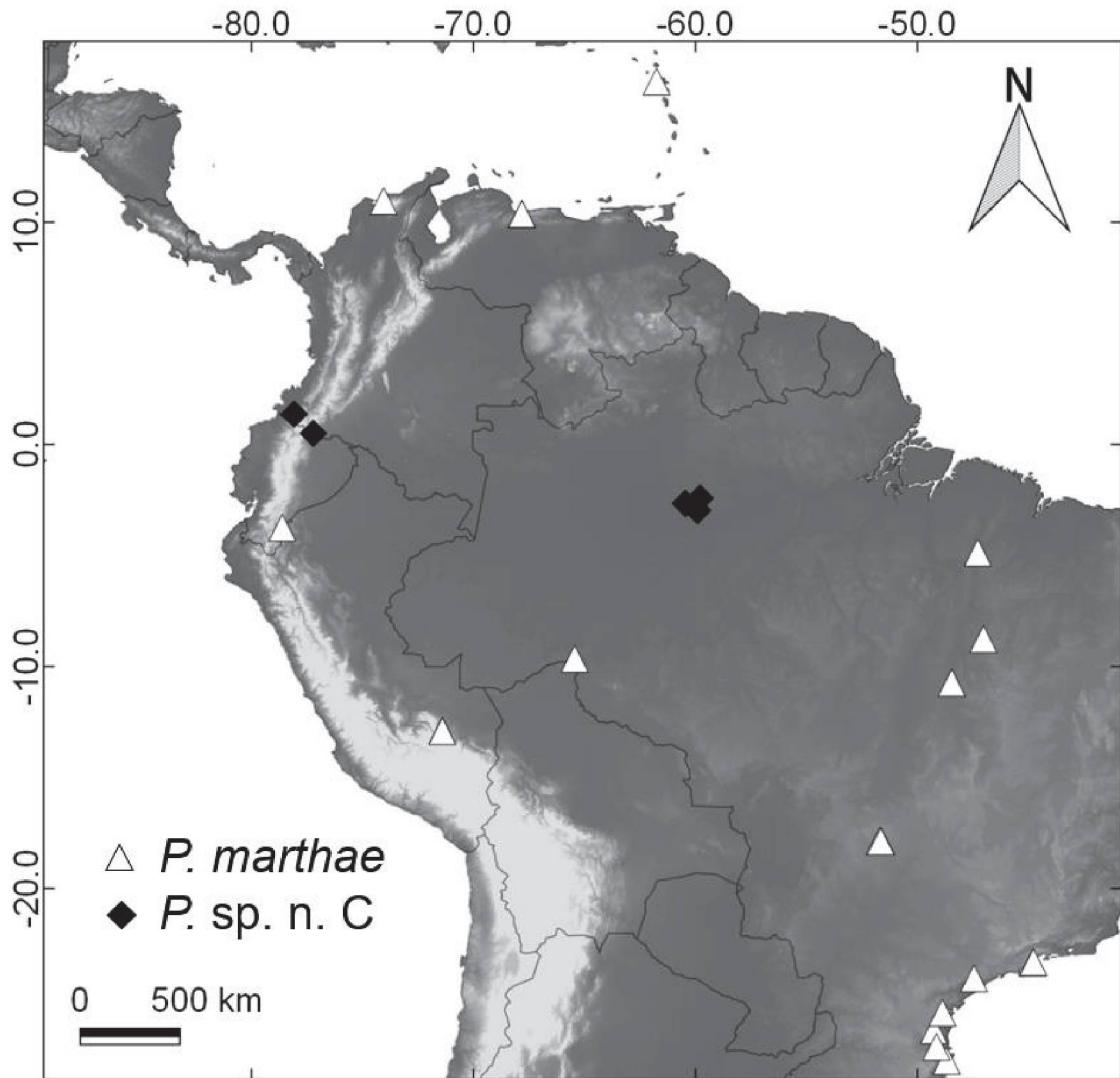


FIGURE 27. Distribution maps for *P. marthae* and *P. sp. n. C*

Acknowledgments

Thanks to Jacques Delabie (CPDC), Itanna Fernandes (INPA), John Longino (JTLC), John Lattke (MIZA/DZUP), Livia Prado (MPEG), Carlos Brandão and Mônica Ulysséa (MZSP), Isabelle Zuercher (NHMB), Dominique Zimmerman (NHMW) and to all the people who gently provided us with important material to realize this study. The members of the Feitosa lab and Lattke lab at UFPR were also crucial as critical readers and evaluators of the identification key presented here. We are indebted to John Lattke, Flavia Esteves, Mônica Ulysséa, and Thiago Silva for the critical reading of previous versions of this paper. This work was supported by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), grants 131363/2017-4 and 302462/2016-3, and the Partnerships for Enhanced Engagement in Research (PEER) Science Program (NAS/USAID – award number AID-OAA-A-11-00012 - project 3-188).

REFERENCES

- Agnarsson, I. & Kuntner, M. (2007). Taxonomy in a changing world: seeking solutions for a science in crisis. *Systematic Biology*, 56, 3, 531–539.
<http://dx.doi.org/10.1080/10635150701424546>
- Antonelli, A. & Sanmartín, I. (2011). Why are there so many plant species in the Neotropics? *Taxon*, 60, 2, 403–414.
- Arias-Penna M. (2008). Capítulo 2: Subfamilia Amblyoponinae. *In*: Jiménez, E., Fernández, F., Arias, T., & Lozano-Zambrano F. (Eds.), Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, Bogotá, D. C., Colombia, pp. 41–52.
- Bolton, B. (1994). *Identification guide to the ant genera of the world*. Harvard University Press, 222 pp.
- Bolton, B. (1995a). A taxonomic and zoogeographical census of the extant ant taxa (Hymenoptera: Formicidae). *Journal of Natural History* 29, 1037–1056.
- Bolton, B. (1995b). *A new general catalogue of the ants of the world*. Cambridge, Mass.: Harvard University Press, 504 pp.
- Bolton, B. (2019). An online catalog of the ants of the world. Available from <http://antcat.org>. (accessed [january 31]).
- Borgmeier, T. (1949). Formigas novas ou pouco conhecidas de Costa Rica e da Argentina (Hymenoptera, Formicidae). *Revista Brasileira de Biologia*, 9, 201–210.
- Brandão, C.R.F. (2000) Major Regional and Type Collections of Ants (Formicidae) of the World and Sources for the Identification of Ant Species. *In*: Agosti, D., Majer, J., Alonso, L.E. & Schultz, T. (Eds.), *Ants: Standard Methods for Measuring and Monitoring Biodiversity*. Biological Diversity Handbook Series. Smithsonian Institution Press. Washington D.C., pp. 172–185.

- Brown, W.L.Jr. (1960). Contributions toward a reclassification of the Formicidae. III. Tribe Amblyoponini (Hymenoptera). *Bulletin of the Museum of Comparative Zoology*, 122, 143–230.
- Brown, W.L.Jr. (1965). Contributions to a reclassification of the Formicidae. IV. Tribe Typhlomyrmecini (Hymenoptera). *Psyche*, 72, 65–78.
- Cantone, S. (2017). Winged ants, the male, dichotomous key to genera of winged male ants in the world, behavioral ecology of mating flight. São Paulo: Autopublicato 1–318.
- Chapman, J.W., Capco, S.R. (1951). Check list of the ants (Hymenoptera: Formicidae) of Asia. Monographs of the Institute of Science and Technology. Manila 1:1–327.
- Dalla Torre, K.W. (1893). Catalogus Hymenopterorum hucusque descriptorum systematicus et synonymicus. Vol. 7. Formicidae (Heterogyna). Leipzig: W. Engelmann, 289 pp.
- Deyrup, M., Davis, L. & Cover, S. (2000). Exotic ants in Florida. *Transactions of the American Entomological Society*, 126, 293–325.
- Emery, C. (1911). Hymenoptera. Fam. Formicidae. Subfam. Ponerinae. *Genera Insectorum*, 118:1–125.
- Esteves, F.A. & Fisher, B.L. (2015). A subfamília Amblyoponinae. In: Delabie, J.H.C., Feitosa, R.M., Serrão, J.E., Mariano C.D.S. F & Majer, J.D. (Eds.), *As formigas poneromorfas do Brasil*. Editus, Ilhéus, Bahia, Brazil., pp. 13–22.
- Fernández, F. (2003). *Introducción a las hormigas de la región Neotropical*. Instituto de Investigación Alexander von Humboldt. Bogotá, Colombia, pp. 307–330.
- Forel, A. (1893). Sur la classification de la famille des Formicides, avec remarques synonymiques. *Annales de la Société Entomologique de Belgique*, 37: 161–167.
- Forel, A. (1909). Ameisen aus Guatemala usw., Paraguay und Argentinien (Hym.). *Deutsche Entomologische Zeitschrift*, 1909, 239–269.
- Harris, R.A. (1979) A glossary of surface sculpture. *Occasional Papers of the Bureau of Entomology of the California Department of Agriculture*, 28, 1–32.
- Hölldobler B. & Wilson E.O. (1986). Ecology and behavior of the primitive cryptobiotic ant *Prionopelta amabilis* (Hymenoptera: Formicidae). *Insectes Sociaux*, 33, 45–58.
- Hölldobler, B. & Wilson E.O. (1990) *The Ants*. Harvard University Press. Cambridge, Massachusetts, USA, 732 pp.

- Hölldobler, B., Obermayer, M. & Wilson, E.O. (1992). Communication in the primitive cryptobiotic ant *Prionopelta amabilis* (Hymenoptera: Formicidae). *Journal of Comparative Physiology*, 171, 1, 9–16.
- <http://dx.doi.org/10.1007/BF00195956>
- Kempf, W.W. 1972b. Catálogo abreviado das formigas da região Neotropical. *Studia Entomologica* 15: 3–344.
- Kozak, K. & Wiens, J., (2007). Climatic zonation drives latitudinal variation in speciation mechanisms. *Proceedings of the Royal Society of London B: Biological Sciences* 274, 1628, 2995–3003.
- Mayr, G. (1866). Myrmecologische Beiträge. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien. Mathematisch-Naturwissenschaftliche Classe. Abteilung I 53, 484–517.
- Nieves-Aldrey J.L., Fontal-Cazalla, F. & Fernández F. (2006). Filogenia y evolución de Hymenoptera. In: Fernández F. & Sharkey M.J. (Eds.), *Introducción a los Hymenoptera de la Región Neotropical*. Universidad Nacional de Colombia, Bogotá, D.C., pp. 37–56.
- Overson, R. & Fisher, B.L. (2015). Taxonomic revision of the genus *Prionopelta* (Hymenoptera, Formicidae) in the Malagasy region. *ZooKeys*, 507, 115–150.
- <http://dx.doi.org/zookeys.507.9303>
- Pennington R., Lavin, M., Prado, D., Pendry, A., Pell, S. & Butterworth, A. (2004). Historical climate change and speciation: neotropical seasonally dry forest plants show patterns of both Tertiary and Quaternary diversification. *Philosophical Transactions of the Royal Society of London: Biological Sciences*, 359, 1443, 515–538.
- <http://dx.doi.org/1098/rstb.2003.1435>
- Rull, V. (2011). Neotropical biodiversity: timing and potential drivers. *Trends in ecology and evolution*, 26, 10, 508–513.
- <http://dx.doi.org/10.1016/j.tree.2011.05.011>
- Rull, V. (2007). On the Origin of present Neotropical biodiversity: a preliminary meta-analysis about speciation timing using molecular phylogenies. *Orsis*, 22, 105–119.
- Shattuck, S. (1999). Australian ants. Their biology and identification. Collingwood, Victoria: CSIRO Publishing, xi + 226 pp.
- Shattuck S. (2008). Revision of the ant genus *Prionopelta* (Hymenoptera: Formicidae) in the Indo-Pacific region. *Zootaxa* 1846: 21–34.

- Schultz, J. (2005). *The ecozones of the world: the ecological divisions of the geosphere*. Springer, 252 pp.
- Smith, D. R. (1979). Superfamily Formicoidea. Pp. 1323–1467 in: Krombein, K. V.; Hurd, P. D.; Smith, D. R.; Burks, B. D. (eds.) 1979. Catalog of Hymenoptera in America north of Mexico. Volume 2. Apocrita (Aculeata). Washington, D.C.: Smithsonian Institution Press, pp. i-xvi, 1199–2209.
- Taylor, R.W. (1987). A checklist of the ants of Australia, New Caledonia and New Zealand (Hymenoptera: Formicidae). CSIRO (Commonwealth Scientific and Industrial Research Organization) Division of Entomology Report 41:1–92.
- Taylor, R.W., Brown, D.R. (1985). Formicoidea. Zoological Catalogue of Australia 2:1-149, 306–348.
- Tundisi, J., Matsumura-Tundisi, T. (2008). Biodiversity in the Neotropics: ecological, economic, and social values. *Brazilian Journal of Biology*, 68, 4, 913–915.
- <http://dx.doi.org/10.1590/S1519-69842008000500002>
- Ward, P.S., Fisher, B.L. (2016). Tales of dracula ants: the evolutionary history of the ant subfamily Amblyoponinae (Hymenoptera: Formicidae). *Systematic Entomology*, 41, 683–693.
- <http://dx.doi.org/10.1111/syen.12186>
- Wilson, E.O. (1955). A monographic revision of the ant genus *Lasius*. *Bulletin of the museum of Comparative Zoology, Harvard*, 1–201.
- Wilson, E.O. (1958). Studies on the ant fauna of Melanesia. I. The tribe Leptogenyini. II. The tribes Amblyoponini and Platythyreini. *Bulletin of the Museum of Comparative Zoology* 118:101–153.
- Yoshimura, M. & Fisher, B.L. (2012). A revision of male ants of the Malagasy Amblyoponinae (Hymenoptera: Formicidae) with resurrections of the genera *Stigmatomma* and *Xymmer*. *PloS ONE*, 7, 3, e33325.
- <http://dx.doi.org/10.1371/journal.pone.0033325>