

## A new species of *Pristomyrmex* Mayr, 1866 (Hymenoptera: Formicidae) from Mindoro, the Philippines

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**ABSTRACT.** *Pristomyrmex pangantihoni* sp. n., a new species from Mindoro Island, is described and illustrated. It is compared with *P. collinus* Wang, 2003 which is widespread in the Philippines.

**Keywords:** ants, Formicidae, *Pristomyrmex*, new species, Philippines, Mindoro

### INTRODUCTION

*Pristomyrmex* Mayr, 1866 had been placed in the Myrmecini (Bolton 2003, Ogata & Okido 2007) until Ward *et al.* (2015) transferred all myrmecine genera to a much expanded Crematogastrini tribe. Hitherto, 57 valid extant species were described in the genus; they are distributed in the tropics and subtropics from Africa to Japan and Australia (Wang 2003, Zettel 2006, 2007, Sarnat & Economo 2013). Wang (2003) provided a taxonomic revision of the entire genus. Regarding the Philippines Zettel (2006) gave an overview of the genus and described three new species; Zettel (2007) added one new species. Including the species from Mindoro described here, the Philippines are inhabited by 19 species, about one third (32.8%) of the world fauna. At least eleven species are considered endemic (see Zettel 2006, 2007, General & Alpert 2012, and this paper).

Only one species, *Pristomyrmex punctatus* (F. Smith, 1860), had previously been recorded from the island of Mindoro. *Pristomyrmex punctatus* has a wide distribution from China to New Guinea and has been recorded from Occidental Mindoro Province (Wang 2003). The new species, *P. pangantihoni*, was collected in a remote area in Oriental Mindoro Province.

### MATERIALS AND METHODS

Specimens were dry mounted on card squares. Examination of specimens was carried out with a LEICA Wild M10 binocular microscope; measurements were taken at magnifications of 80×. Stacked digital images (Figs. 1–4) were taken with a Leica DFC camera attached to a Leica MZ16 binocular microscope with the help of Leica Application Suite V3, stacked with Zere-Stacker 64-bit, and processed with Adobe Photoshop 7.0.

Terminology and method of description follows Wang (2003). As in Zettel (2006) definition of AL is adjusted to Wang (2003: Fig. 2); TL is adjusted to the state of the outstretched specimens. All measurements are in millimetres.

Measurements and indices (see also Wang 2003: Figs. 1–3):

- |    |  |
|----|--|
| TL | Total length. Measured in a straight line from apex of open mandibles to apex of gaster of the outstretched specimen (preparation different from illustrations). |
| HW | Head width. Maximum width of head, in full-face view in front of eyes (excluding eyes).  |

- HL Head length. In full-face view, excluding mandibles, measured from midpoint of a straight line across posterior head margin either to anterior-most point of apex of median tooth on anterior clypeal margin or, if median tooth absent, to midpoint of line connecting frontal-most apices of the two lateral teeth of anterior clypeal margin.
- CI Cephalic index.  $HW/HL \times 100$ .
- SL Scape length. Length of antennal scape, including lamella encircling base of scape but excluding basal condyle.
- SI Scape index.  $SL/HW \times 100$ .
- EL Eye length. Maximum length of eye.
- PW Pronotal width. Maximum width of pronotum in dorsal view (excluding spines).
- AL Alitrunk length (= mesosoma length). Diagonal length of alitrunk in lateral view, from anterior-most point of declivitous area of pronotum to posterior-most point of apex of metapleural lobe.
- PSL1 Pronotal spine length. Straight distance from anterior base to apex of pronotal spine.
- PSL2 Propodeal spine length. Straight distance from posterior base to apex of propodeal spine.
- PPW Maximum width of postpetiole in dorsal view.
- PPL Dorso-median length of postpetiole.
- PPI Postpetiole index =  $PPW/PPL \times 100$ .

***Pristomyrmex pangantihoni* sp. n.** (Figs. 1–4)

Type material: holotype (worker) and paratype (worker) labelled “Philippines: Mindoro Or. Roxas, San Vicente, Taugad Diit, Taugad Daka Forest 27.IX.2014, leg. C. V. Pangantihon (P513)”. The holotype will be deposited in the National Museum Manila, the paratype in the

first author’s collection.

Type locality: Philippines, Mindoro Island, Mindoro Oriental province, municipality of Roxas, barangay San Vicente, sitio Taugad Diit, Taugad Daka Forest, ca. 400–500 m a.s.l., ca. 12°38’ N, 121°20’ E.

Diagnosis (worker): Predominantly black, moderately large species, TL = 4.8. Head with large punctures that are sparse dorsally, and relatively dense on genae and posterolaterally of eyes. Frontal carinae short, hardly exceeding antennal fossae; antennal scrobes absent. Clypeus dorsally without sculpture; ventral surface with small medial tooth; anterior margin with 7–8 small denticles medially and two pairs of blunt teeth laterally. Scape relatively short (SI = 95–97). Masticatory margin of mandible with four teeth and diastema. Dorsum of mesosoma smooth and polished. Pronotum with pair of short, but distinct teeth (PSL1 0.15–0.17), which are clearly shorter than propodeal spines (PSL2 0.26–0.28). Petiole stout, anterior face of node continuous with dorsal surface of peduncle. Both petiolar node and postpetiole with several setae of varying length. First gastral tergite without erect setae.

Description:

Measurements: holotype worker: TL 4.8, HL 1.27, HW 1.32, CI 104, SL 1.25, SI 95, EL 0.22, AL 1.21, PSL1 0.17, PSL2 0.28, PW 0.77, PPW 0.34, PPL 0.39, PPI 87. Paratype worker: TL 4.8, HL 1.29, HW 1.33, CI 103, SL 1.29, SI 97, EL 0.22, AL 1.21, PSL1 0.15, PSL2 0.26, PW 0.79, PPW 0.36, PPL 0.40, PPI 93.

Structures: Head (Figs. 1–3) smooth and polished, with large punctures on dorsum, genae, and posterolaterally of eyes. Frontal carinae short, hardly exceeding frontal fossae. Antennal scrobes and frontal lobes not developed; antennal insertion entirely exposed. Clypeus dorsally without median carina, ventrally with distinct central tooth; anterior margin with 7–8 small denticles in middle and two pairs of blunt teeth at sides. Labrum apically with pair of small tubercles. Mandibles (Fig. 2) smooth and shiny; masticatory margin of mandible with four teeth: strongest apical + second strongest (hardly shorter) preapical +

long diastema + two small basal teeth of similar size; basal margin of mandible with slight dilatation at mid-length, but lacking distinct tooth. Palp formula 1, 3. Antennal scapes short, when lying on dorsum of head, slightly surpassing posterior margin of head. Eyes containing 11 ommatidia in longest row. Profile shape of mesosoma, petiole and postpetiole as in Figure 3. Dorsum of mesosoma slightly convex, smooth and polished except for a few scattered fine hair pits (Fig. 4). Pronotum with pair of relatively strong teeth; propodeum with pair of spines that are distinctly longer than pronotal teeth (Fig. 3). Mesopleural ridge almost straight, anteriorly not protruded into distinct tooth. Metapleural lobes subtriangular, acute. Petiole, postpetiole, and gaster smooth and shiny. Petiole in profile with moderately long peduncle, node without distinct angles. Postpetiole in profile rounded dorsally, in dorsal view broadening from front to back.

Pilosity: Dorsal surfaces of head, mesosoma, petiolar node, and postpetiole with numerous, moderately long setae. First gastral tergite lacking erect or suberect setae. Clypeus with forward projecting setae between teeth and with four pairs of long setae at sides of medial part. Scapes and tibiae with numerous erect setae.

Colour: Almost entirely black; clypeus, labrum, mandibles, antennae, and tarsi brown.

Notes: *Pristomyrmex pangantihoni* sp. n. belongs to the *P. quadridens* group (sensu Wang 2003) and is similar and probably closely related to *P. collinus* Wang, 2003. The two species share most of the structural characteristics used in the key by Zettel (2006) and have similar surface structures. Another similar species is *P. quadridens* Emery, 1897. Whereas *P. collinus* is endemic to the northern and central Philippines (records from Luzon, Tablas, Panay, and Negros), *P. quadridens* is distributed on New Guinea and the Moluccas and reaches the Philippines in the southeast (Leyte) (Wang 2003, Zettel 2006). *Pristomyrmex pangantihoni* sp. n. differs from both species by black colour, longer pronotal and propodeal spines, higher number of setae on both petiole and postpetiole, and much larger size (measure-



**Figs 1 – 4.** *Pristomyrmex pangantihoni* sp. n., holotype: (1) Head, full face view. (2) Mandible. (3) Lateral view. (4) Dorsal view.

ments partly taken from Wang 2003 and Zettel 2006): TL of *P. pangantihoni* sp. n. 4.8 mm, of *P. collinus* and *P. quadridens* 3.3–4.1 mm; HW of *P. pangantihoni* sp. n. 1.32–1.33 mm, of *P. collinus* and *P. quadridens* 0.77–0.94 mm. The puncturation on the head of *P. pangantihoni* sp. n. is more strongly developed than in *P. collinus*, but not as foveolate as in *P. quadridens*. Also the shape of the petiole is intermediate between the two species. *Pristomyrmex distinguendus* Zettel, 2006, another similar species of Luzon and Leyte, can be distinguished by brown colour, small size, long frontal carinae, distinct antennal scrobes, and very short pronotal and propodeal teeth.

*Pristomyrmex pangantihoni* sp. n. is the second species recorded from Mindoro. Wang (2003) recorded *P. punctatus* from San José in Occidental Mindoro Province; this species has a wide distribution from China to New Guinea.

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