

A New Species of the Ant Genus *Tetraponera* Smith, 1852 (Hymenoptera: Formicidae: Pseudomyrmecinae) from Thailand

KUNTIMA YODPRASIT¹, WATTANACHAI TASEN^{1*}, TADSANAI JEENTHONG²,
NOPPARAT BUDDHAKALA³ AND WEEYAWAT JAITRONG^{2,3*}

¹Department of Forest Biology, Faculty of Forestry, Kasetsart University, Bangkok 10900, THAILAND

²Office of Natural Science Research, National Science Museum, 39, Moo 3, Khlong 5,
Khlong Luang, Pathum Thani 12120, THAILAND

³Division of Biology, Faculty of Science and Technology, Rajamangala University of Technology Thanyaburi,
Thanyaburi, Pathum Thani 12120, THAILAND

*Corresponding author. Wattanachai Tasen (fforwct@ku.ac.th), Weeyawat Jaitrong (weeyawat@nsm.or.th)

Received: 20 February 2025; Accepted: 10 August 2025; Date of Publication: 20 October 2025

https://zoobank.org/urn:lsid:zoobank.org/pub: C694C17C-2302-4BC9-9E83-F4AA47A3B070

ABSTRACT.– *Tetraponera* Smith, 1852, a large ant genus comprising 87 extant and seven fossil species, is primarily distributed in the Afrotropical, Oriental, and Australasian regions. A new species, *T. sirindhornae* Yodprasit, Tasen & Jaitrong, sp. nov., is described from southern Thailand based on worker, dealate queen, and male castes. The new species exhibits worker dimorphism and is morphologically similar to *T. binghami* (Forel, 1902), *T. connectens* Ward, 2001, and *T. notabilis* Ward, 2001 in possessing an elongated head, but differs by the presence of a distinct mandibular gap between masticatory margins when the mandibles are closed (in the case of major worker and queen). The new species was found nesting in a dead rubber tree branch on a tree within a rubber plantation near a stream.

KEYWORDS: dimorphism, new species, taxonomy, key

INTRODUCTION

Tetraponera Smith, 1852, a large ant genus comprising 87 extant and seven fossil species (Bolton, 2025), is widespread in the Afrotropical, Oriental, and Australasian regions (Ward, 2001, 2022; Xu and Chai, 2004; Bharti and Akbar, 2014). These ants typically nest in dead twigs of trees and shrubs or, less frequently, in the domatia of specialized ant-plants (Ward, 2001, 2022; Jaitrong et al., 2024). After the revisions of Afrotropical (47 species in five species groups) and Oriental and Australasian (33 species in four species groups) species, *Tetraponera* have been supplemented by subsequent studies (Ward, 2001, 2006, 2009, 2022). Xu and Chai (2004) added five new species and recognized 13 species from China, while Bharti and Akbar (2014) reported ten species, including one new species, from India. Recently, Khachonpisitsak et al. (2020) listed 15 species from Thailand, including two species with type localities in the country (*T. connectens* Ward, 2001 and *T. notabilis* Ward, 2001).

The genus *Tetraponera* is generally characterized by worker monomorphism; dimorphism is rarely observed. However, we recently collected a dimorphic species of the genus from southern Thailand. This species, which belongs to the *T. nigra* species group and exhibits the greatest morphological similarity to *T. notabilis* from northeastern Thailand, is here described as new species based on worker (major and minor), queen, and male castes.

MATERIALS AND METHODS

Specimens were collected from Li Phang Sub-district, Palian District, Trang Province, southern Thailand. The holotype and paratypes of the new species are pin-mounted dry specimens. The type material was compared with high-resolution images of the holotypes and syntypes of the closely related species *Tetraponera binghami* (Forel, 1902), *T. connectens* Ward, 2001, and *T. notabilis* Ward, 2001, available on AntWeb (2025). A paratype of *T. connectens* and a paratype of *T. notabilis* deposited in the Natural History Museum of the National Science Museum Thailand (THNHM) were examined. Most morphological observations were made with a ZEISS Discovery V12 stereoscope. The holotype and paratype of the new species are deposited in THNHM.

Multi-focused montage images were produced using NIS-Elements-D from a series of source images taken under a Nikon Digital Sight-R1 camera attached to a Nikon AZ100M stereoscope. The holotype and 20 paratypes were measured using a micrometer (accurate to 0.01 mm) for the following measurements and indices.

The abbreviations used for the measurements and indices are as follows (provided related reference):

TL Total length, total outstretched length of the individual, from the mandibular apex to the gastral apex.

HW Maximum head width, excluding eyes.

- HL** Head length, taken along midline, from posterior margin of head to anterior extremity of clypeus.
- EL** Eye length, measured in same plane of view as HL.
- MFC** Minimum distance between frontal carinae.
- SL** Scape length, excluding radicle.
- FL** Length of profemur, measured along its long axis in posterior view.
- FW** Width of profemur, measured in same view as FL and at right angles to it.
- FeL** Femur length. Maximum length of meta-femur, measured from base to apex.
- PL** Length of petiole in lateral view from lateral flanges of anterior peduncle to posterior margin of petiole.
- ML** Mesosoma length, measured laterally from anterior surface of pronotum (where the pronotum meets the cervical shield) diagonally to posterior extension of propodeal lobes.
- PH** Maximum height of petiole, measured in same view as PL, and excluding protruding teeth or lobes at anteroventral or posteroventral extremities of petiole.
- DPW** Maximum width of petiole, measured in dorsal view.
- LHT** Length of metatibia, excluding proximomedial condyle.
- CI** Cephalic index: HW / HL
- FCI** Frontal carina index: MFC / HW
- REL** Relative eye length: EL / HL
- REL2** Relative eye length, using HW: EL / HW
- SI** Scape index: SL / HW
- SI3** Scape index, using EL: SL / EL
- FI** Profemur index: FW / FL
- PLI** Petiole length index: PH / PL
- PWI** Petiole width index: DPW / PL

RESULTS

Taxonomy

Subfamily Formicinae Latreille, 1809

Genus *Tetraponera* Smith, 1852

Tetraponera sirindhornae Yodprasit, Tasen & Jaitrong, sp. nov.

<http://zoobank.org/urn:lsid:zoobank.org:act:A3F1F5C1-B257-42DF-9E7B-655188F6AC7D>
(Figs 1, 2)

Types.— Holotype. Major worker (THNHM-I-00030104), S Thailand, Trang Province, Palian District, Ban Li Phang, Khao Ting Cave, 7°9'35"N, 99°

48°1"E, 19.V.2022, W. Jaitrong leg., TH22-WJT-156. Paratypes: 4 major workers (THNHM-I-00030106 to THNHM-I-00030109), 16 minor workers (THNHM-I-00030110 to THNHM-I-00030125), 1 dealate queen (THNHM-I-00030105), and 2 males (THNHM-I-30103 and THNHM-I-30126) same data as holotype.

Major worker description (holotype and paratypes, Fig. 1A–C)

Measurements (in mm). Holotype – TL 7.25, HW 1.00, HL 1.40, EL 0.53, MFC 0.28, SL 0.50, FL 0.73, FW 0.40, FeL 0.75, PL 0.88, ML 1.85, PH 0.40, DPW 0.30, LHT 0.75, CI 71, FC 28I, REL 38, REL2 53, SI 50, SI3 94, FI 55, PLI 45, PWI 34. Paratype major workers (n = 5) – TL 6.75–7.45, HW 0.95–1.03, HL 1.35–1.43, EL 0.50–0.55, MFC 0.28–0.30, SL 0.50–0.53, FL 0.68–0.75, FW 0.40–0.43, FeL 0.73–0.80, PL 0.75–0.85, ML 1.8–1.90, PH 0.38–0.40, DPW 0.30–0.33, LHT 0.75–0.80, CI 70–72, FCI 27–30, REL 35–40, REL2 53–58, SI 50–53, SI3 91–100, FI 574–59, PLI 45–54, PWI 35–40.

Head in full-face view subrectangular, distinctly longer than broad, sides almost parallel, with posterior margin almost straight medially; posterolateral corner of head roundly convex. Mandible subtriangular, masticatory margin with medium size apical tooth followed by medium size preapical tooth, two smaller teeth, and large basal tooth; basal margin of mandible slightly shorter than masticatory margin, weakly convex and with a blunt tooth; in profile mandible truncate (Fig. 1A); when mandibles closed a distinct gap present between masticatory margins. Clypeus in full-face view narrow, anterior margin concave bearing a pair of ill-defined denticles. Eye large, elliptical, weakly convex, located laterally slightly posterior to middle length of head; outer margin of eye reaching lateral margin of head. A small ocellus present that is located between eyes at the level of posterior margin of eyes. Antenna 12-segmented; antennal scape clavate, short (0.50–0.53 times as long as head width), reaching anterior margin of eye; antennal segment II almost as long as segments III+IV. Frontal lobe narrow, lateral margin weakly convex and covering only half of torulus in full face view. Frontal carina present, reaching half-length distance between posterior margin of torulus to anterior margin of eye.

Mesosoma in profile slender with well-defined lateral pronotal margins; dorsal outline of pronotum weakly convex; mesonotum straight but sloping gradually to metanotal groove; dorsal face of propodeum rounding gradually into declivitous face; mesopleuron shorter than high, clearly demarcated from mesonotum by distinct suture; metapleuron not clearly demarcated from lateral face of propodeum; in dorsal view pron-

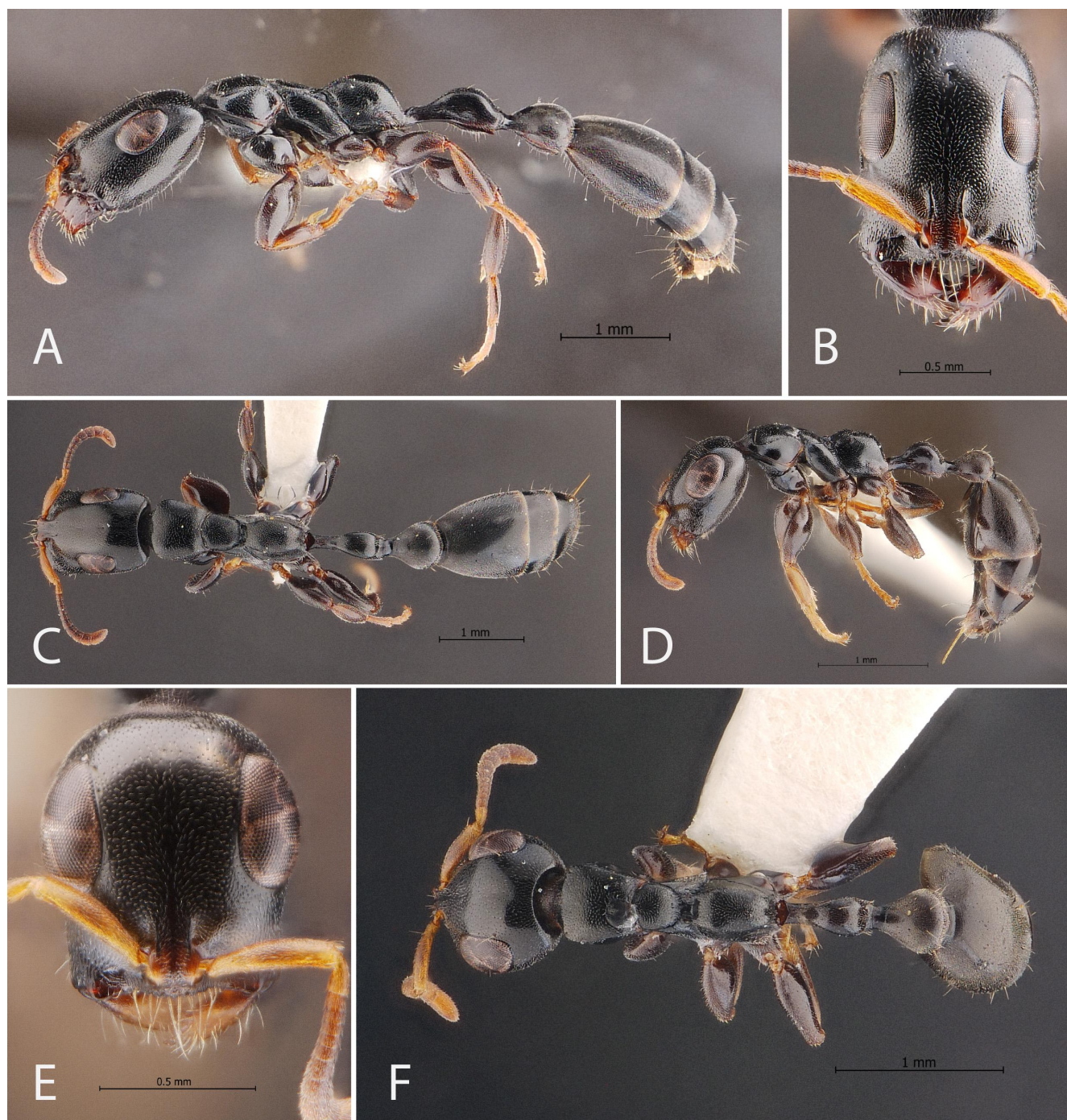


FIGURE 1. *Tetraponera sirindhornae* sp. nov. **A–C.** major worker (holotype, THNHM-I-00030104); **D–F.** minor worker (paratype, THNHM-I-00030124). **A** and **D**, body in profile; **B** and **E**, Head in full-face view; **C** and **F**, body in dorsal view.

tum subtrapezoidal, wider anteriorly than posteriorly, and broader than both mesonotum and propodeum; metanotal groove in profile deep. Legs short, profemur swollen.

Petiole in profile view pedunculate, clearly longer than high, dorsal outline of petiolar node roundly convex; petiole with a pair of posteroventral teeth formed by lateral projections of petiolar sternite. Postpetiole in dorsal view much broader than petiole but distinctly

shorter. First gastral tergite largest and extensively overlapping sternite.

Body entirely smooth and shiny, except for hair pits, which dense and vary in size. Body colour entirely black, except for reddish-brown mandibles, yellowish-brown scape, reddish-brown flagella, darkish brown coxae, and lighter colored distal portions of legs. Erect hairs sparse, present on gaster, venter, and apex of

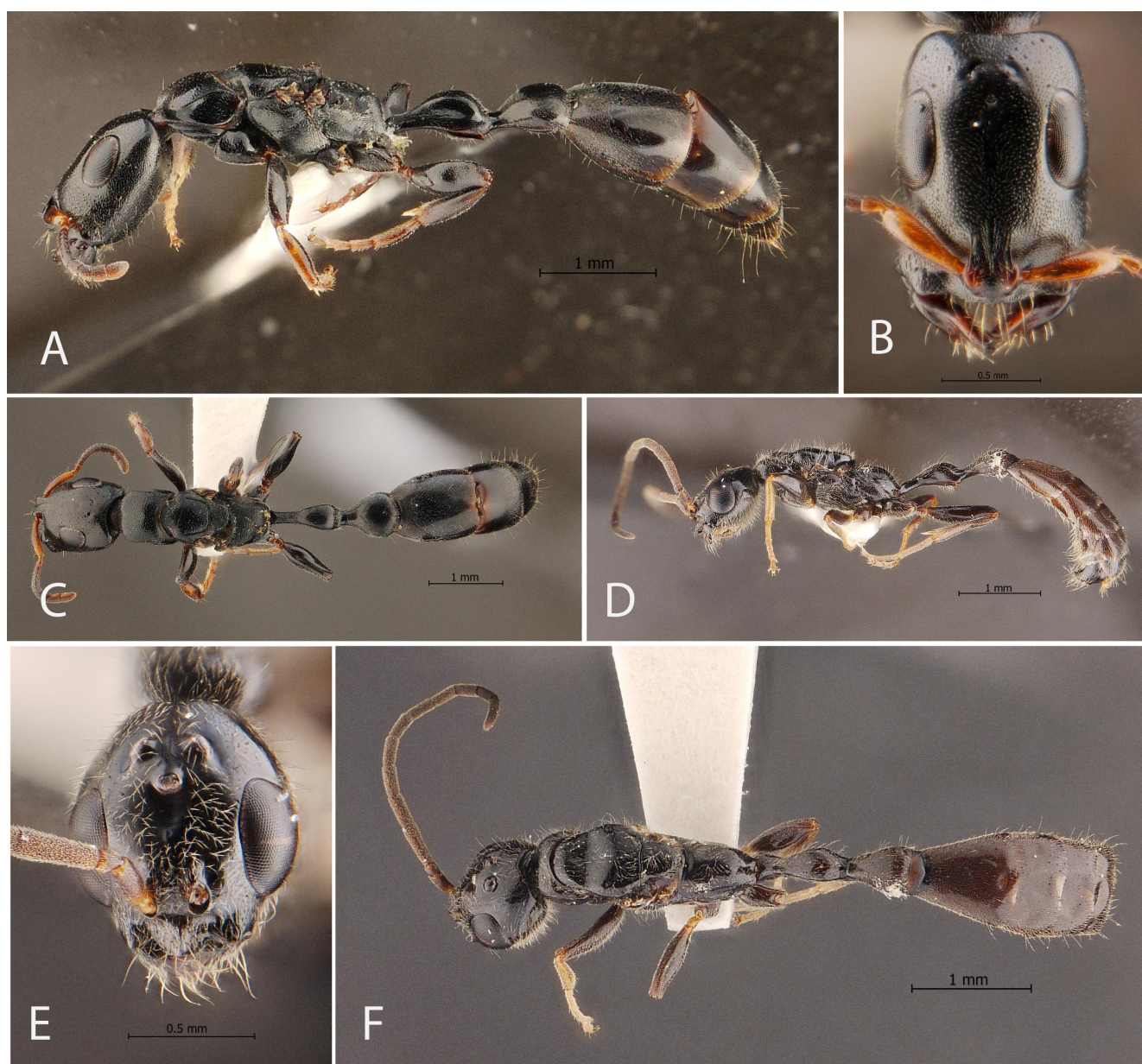


FIGURE 2. *Tetraponera sirindhornae* sp. nov. **A–C.** Dealate queen (paratype, THNHM-I-00030105); **D–F.** male (paratype, THNHM-I-00030126). **A** and **D**, body in profile; **B** and **E**, Head in full-face view; **C** and **F**, body in dorsal view.

head, and the following dorsal surfaces: 2–3 on vertex, 2–4 on pronotum, 2–4 on petiole, 2–4 on postpetiole.

Minor worker description (paratypes, Fig. 1D–F)

Measurements (in mm).– Paratype minor workers ($n = 5$) – TL 4.23–4.95, HW 0.68–0.75, HL 0.88–1.00, EL 0.43–0.45, MFC 0.18–0.20, SL 0.40–0.45, FL 0.55–0.60, FW 0.25–0.30, FeL 0.55–0.60, PL 0.45–0.55, ML 1.20–1.30, PH 0.25–0.30, DPW 0.13–0.23, LHT 0.60–0.65, CI 75–79, FCI 20–29, REL 45–50, REL2 60–64, SI 57–63, SI3 89–100, FI 46–50, PLI 50–62, PWI 30–43.

Similar to the major worker in structure, sculpture and pilosity, with the following difference that should

be noted: body clearly smaller; head in full-face view slightly shorter in minor worker, slightly wider posteriorly than anteriorly, with posterior margin roundly convex; mandible subtriangular (not truncate in profile), masticatory margin with four distinct teeth; basal margin of mandible slightly shorter than masticatory margin, bearing a large tooth; anterior clypeal margin feebly convex bearing ca. ten small denticles; eye large, convex, located laterally slightly posteriorly; outer margin of eye slightly extending beyond lateral margin of head; ocellus absent; antennal scape clavate, short (0.81–0.86 times as long as head width), extending beyond anterior margin of eye but not reaching mid-length of eye. Petiole and postpetiole are relatively

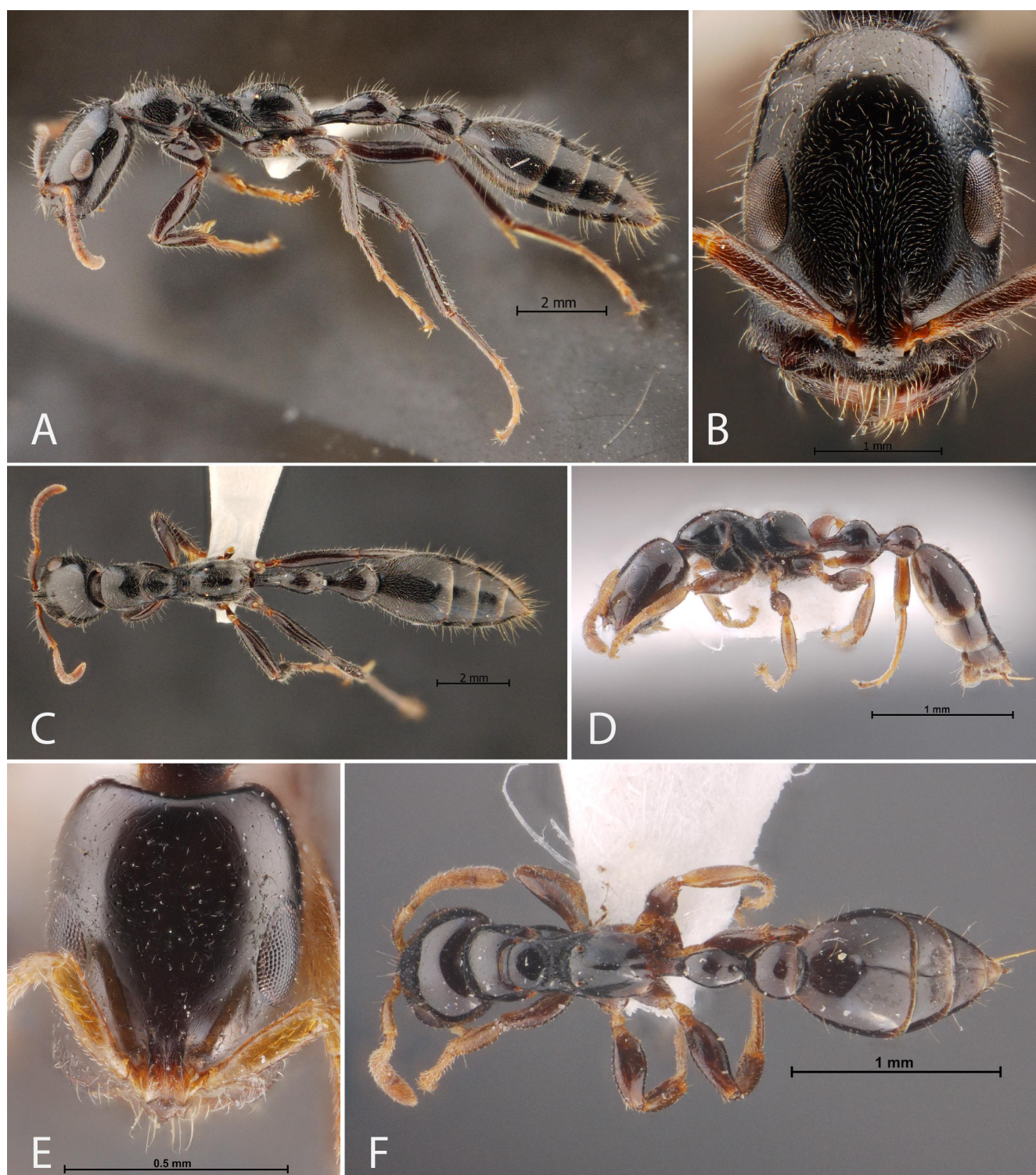


FIGURE 3. *Tetraponera* spp. **A–C.** *Tetraponera binghami* (non-type worker, TH15-WJT-264); **D–F.** *Tetraponera connectens* (paratype worker, THNHM-I-00011251). A and D, body in profile; B and E, Head in full-face view; C and F, body in dorsal view.

shorter than in the major worker. Erect hair on postpetiolar dorsum is denser than in the major worker.

Dealate queen description (paratype, Fig. 2A–C)

Measurements (in mm).– Paratype – TL 8.00, HW 0.95, HL 1.35, EL 0.53, MFC 0.30, SL 0.48, FL 0.70,

FW 0.38, FeL 0.78, PL 0.95, ML 2.00, PH 0.45, DPW 0.35, LHT 0.75, CI 70, FCI 32, REL 39, REL2 56, SI 51, SI3 91, FI 54, PLI 47, PWI 37.

The dealate queen is most similar to the major worker in structure especially for the shape of mandible, sculpture, and pilosity, with the following

difference that should be noted: body slightly larger; three ocelli present; masticatory margin of mandible with four teeth, a distinct gap between masticatory margins present when mandible closed; mesosoma large, in dorsal view slightly narrower than head. Pronotum flat, long, subrectangular, longer than mesoscutum; mesoscutum flat with long and distinct parapsidal line; mesoscutellum shorter than propodeum, much narrower than mesoscutum; metanotum short, deeply indented, clearly defined from propodeum with deep furrow; In profile, mesopleuron large, divided into anepisternum and katepisternum; propodeum with well-defined laterodorsal margins.

Males (paratypes, Fig. 2D–F)

Measurements (in mm).– Paratype males ($n = 2$) – TL 6.90–7.03, HW 0.90, HL 1.10–1.13, EL 0.50, MFC 0.20, SL 0.20–0.25, FL 0.80–0.83, FW 0.25–0.30, FeL 0.90, PL 0.85–0.90, ML 1.90–1.95, PH 0.30–0.33, DPW 0.28, LHT 0.85–0.90, CI 80–82, FCI 22, REL 44–45, REL2 56, SI 22–28, SI3 40–50, FI 31–36, PLI 35–37, PWI 31–33.

Head in full-face view slightly longer than broad; posterior margin of head narrow; distance between mid-point of posterior margin of head and posterior margin of eye about 2.3 times as long as distance between mandibular base and anterior margin of eye. Clypeus broad, with longitudinal central carina, anterior margin bluntly angled, without denticles. Mandibles short and subtriangular; masticatory margin edentate with apex sharply pointed. Eye large, located laterally and anterior to mid-length of head; vertex with three relatively larger ocelli, arranged in triangle. Antenna 13-segmented; antennal scape shorter than each of antennal segments III–V; antennal segment III longest.

Mesosoma in dorsal view slightly narrower than head including eyes. Pronotum in dorsal view short, much shorter but slightly narrower than mesoscutum. Mesoscutum in dorsal view subtrapezoidal, clearly longer than broad, wider posteriorly than anteriorly; parapsidal line indistinct; mesoscutellar disc elliptical, slightly longer than broad. Metanotum short, located lower than mesoscutellar disc when observe in profile, clearly defined from propodeum with deep furrow. In profile view, dorsal outline of mesosoma weakly convex that slopes steeply to metanotum; propodeum lower than mesoscutum and mesoscutellum, with dorsal outline weakly convex and rounded into declivity; mesopleuron in profile large, divided into anepisternum and katepisternum, the latter being equal to the former. Petiole and postpetiole in profile both clearly longer than high and elevate posteriorly; in dorsal view postpetiole slightly shorter but much broader

than petiole, petiolar node broadest in the middle, postpetiolar node widening posteriorly. Gaster in profile relatively long compared with mesosoma; in dorsal view gastral segment I longer than remaining segments, much narrower anteriorly than posteriorly. Gastral segment III as long as each of segments IV and V.

Sculpturing and coloration are similar to the worker. Entire body covered with dense erect hairs mixed with dense pubescence. Erect hairs on gastral tergite sparser than on elsewhere.

Remarks.– *Tetraponera sirindhornae* is most similar to *T. binghami* (Forel, 1902) (Fig. 3A–C) from India and *T. notabilis* Ward, 2001 from Thailand, sharing features such as an elongated head, mandibles with more than three teeth, an elongate petiole, and posteroventral teeth on petiolar sternite. However, *T. sirindhornae* can be distinguished from *T. notabilis* by: 1) clear worker dimorphism (monomorphic in *T. notabilis*); 2) major workers with larger size (HW 0.95–1.03 in *T. sirindhornae*; 0.87–0.90 in *T. notabilis*), thicker, blunt mandibles with a distinct gap when closed (no gap in *T. notabilis*), and a shorter head (CI 70–72 in *T. sirindhornae*; CI 73–77 in *T. notabilis*); 3) minor workers with shorter heads (CI 70–72 in *T. sirindhornae*; CI 73–77 in *T. notabilis*), shorter petiolar nodes (almost as long as high in *T. sirindhornae*; longer than high in *T. notabilis*), and indistinct posteroventral teeth on petiolar sternite (sharp and distinct in *T. notabilis*). *Tetraponera sirindhornae* differs from *T. binghami* by 1) smaller body size (HW 0.95–1.03 in *T. sirindhornae*; HW 1.06–1.27 in *T. notabilis*); 2) sparse erect hairs on the body dorsum (dense in *T. binghami*); 3) a concave anterior clypeal margin (convex in *T. binghami*). While *T. sirindhornae* shares an elongate head and general appearance with *T. connectens* Ward, 2001 (Fig. 3D–F) from Thailand, it is readily distinguished by its worker mandibles with 4–5 teeth and a basal margin shorter than the masticatory margin (three teeth and basal margin longer than masticatory margin in *T. connectens*).

Etymology. The specific name is dedicated to Her Royal Highness Princess Maha Chakri Sirindhorn of the Kingdom of Thailand.

Distribution.– Thailand (Trang Province).

Bionomics.– Most species of the genus are unspecialized arboreal nesters, inhabiting dead twigs, branches, insect-bored cavities, or domatia of living plants (Ward 2001, 2006; Jaitrong et al., 2024). The new species was found nesting in a dry rubber tree branch on a tree within an old rubber plantation near a stream (Fig. 4).



FIGURE 4. Type locality (7°9'35"N, 99° 48'1"E), a rubber plantation in Palian District, Trang Province, southern Thailand.

A limestone cave, a local tourist attraction, is located adjacent to the plantation, and the surrounding area has been developed for tourism. Two years after the type series collected, the plantation was clear cut, and this ant species has not been observed there since. A single nest of this new species was found within a dry branch approximately 3 cm in diameter and 1.5 m long, which had a cavity inside. The colony was small, comprising approximately 100 workers. The proportion between minor and major workers is about 5:1. One queen, several males, and pupae were present, but no alate queens were observed.

Key to known species of *Tetraponera* of the Thailand based on the worker caste (updated from Ward, 2001)

1. Head with three distinct ocelli; in dorsal view pronotal humeri appearing subangulate; head densely punctate and lacking extensive shiny interspaces between punctures; large species, HW 1.14–2.07 (*T. rufonigra* species group). 2
- Head almost always lacking ocelli, very rarely with two or three faint ocelli (in a few large workers of *T. nigra* and *T. sirindhornae*); pronotal humeri varying from narrowly to broadly rounded, but not subangulate; head usually less densely punctate and with conspicuous shiny interspaces between punctures (always the case in species with HW > 1.10); size variable (HW 0.49–1.48). 3
2. Larger species (HW 1.62–2.07), with smaller eyes (REL2 0.35–0.37); usually bicolored, dark head and gaster contrasting with orange-brown mesosoma; erect hairs common on the mesosoma dorsum, including the propodeum. *T. rufonigra* (Jerdon, 1851)
- Smaller species (HW 1.14–1.51), with larger eyes (REL2 0.49–0.56); body unicolorous dark brown; erect hairs sparse on the mesosoma dorsum, absent from the propodeum. *T. pilosa* (Smith, 1858)
3. Mandible slender, with three teeth on masticatory margin, and 1–2 denticles on basal margin; basal

- margin of mandible much longer than masticatory margin; posteroventral margin of petiole in form of thin, ventrally protruding hood, which is distinctly separated from helcium venter when postpetiole is in its normal horizontal position; gastral tergite I (abdominal tergite IV) sparsely pubescent, appressed hairs separated by their lengths or more; relatively small species, HW 0.49–0.93 (*T. allaborans* species group). 4
- Mandible more robust, with 4–5 teeth on masticatory margin, and 0–1 denticles on basal margin; basal margin of mandible subequal to, or shorter than, masticatory margin; posteroventral margin of the petiole closely associated with helcium venter, although it may be flanked by ventrolateral flanges; gastral tergite I usually densely pubescent; size variable, HW 0.63–1.48 (*T. nigra* species group). ... 8
4. Small, black species (HW 0.58–0.61, LHT 0.50–0.52), with disproportionately small eyes (REL 0.32–0.34), short scape (SI2 42–45) and broad profemur (FI 47–48); pronotal dorsum rounding into sides, lateral margins poorly developed; mesopropodeal impression lacking a distinct metanotal plate but may be bisected by a weak transverse ridge that interrupts the longitudinally rugulate sculpture. ... *T. connectens* Ward, 2001
- Size, color, scape and profemur variable but if small (HW < 0.65 and LHT < 0.55) and black, then eyes larger (REL 0.35–0.41); either lateral pronotal margins better developed or mesopropodeal impression with a distinct, flattened metanotal plate. 5
5. Larger species (HW 0.62–0.93, usually > 0.70); body predominantly black, although petiole, postpetiole and limb appendages may be lighter in color; propodeum typically low and broad, such that PDI 91–109; in one rare aberrant morph with HW > 0.79 the propodeum is inflated and prominently raised; pronotal margin varying from sharp- to soft-edged, and maximum width of the pronotum generally occurring below the margin. *T. allaborans* (Walker, 1859)
- Smaller species (HW 0.49–0.79), color variable but often with at least the postpetiole and sometimes most of the body yellow or orange-brown; if HW > 0.65 then body mostly dark brown to black but propodeum notably tall (in profile) and slender (posterior view), such that PDI 112–124; pronotal margin usually relatively soft-edged and occurring at the point of maximum width of the pronotum. 6
6. Petiole relatively short and high (PLI 60–68, PWI 46–54, PL/SL 1.09–1.19); body and legs dark to medium brown (pronotum, petiole and postpetiole may be lighter in color); erect pilosity tending to be rather common, with 8–10 long erect hairs often visible in profile on the promesonotum (but sparse or abraded in some specimens). *T. crassiuscula* (Emery, 1900)
- Petiole slenderer (PLI 45–59, PWI 38–48, PL/SL 1.20–1.41); standing pilosity relatively sparse, 1–2 pairs of long erect hairs visible in profile on the pronotum, none on the mesonotum; size (HW 0.51–0.79) and color variable. 7
7. Head, mesosoma, and most of gaster black or dark brownish black, other body parts variable in color, postpetiole and tibiae often a contrasting lighter yellow or orange-brown; larger species, on average (HW 0.54–0.79, usually greater than 0.60). *T. extenuata* Ward, 2001
- Body color predominantly yellow- or orange-brown, the gaster sometimes partially or wholly dark brown; smaller species (HW 0.51–0.64). *T. modesta* (Smith, 1860)
8. Larger species (HW 0.95–1.48), with long legs (LHT/HL 0.80–0.97); erect hairs common, MSC 6–71 (usually > 10) and CSC 10–40, cephalic hairs scattered over dorsal surface of head and often grading into shorter, suberect pubescence; mesopropodeal impression flanked laterally by raised prominences (containing metanotal spiracles) but otherwise more or less open, not bounded by lateral ridges that enclose a pit-like depression (a shallow pit present in *T. binghami*). 9
- Smaller species, on average (HW 0.63–1.44); if HW > 0.92, then erect hairs less common (MSC 0–22, CSC 0–4) and sparse cephalic hairs arranged in pairs on dorsum of head, distinct from much shorter, appressed pubescence; legs generally shorter (LHT/HL 0.58–0.86); mesopropodeal impression partly or entirely flanked laterally by raised ridges that enclose a pit-like depression. 11
9. Head elongate (CI 70–77) and petiole very slender (PLI 34–43). *T. binghami* (Forel, 1902)
- Head broader (CI 76–94, usually > 80); petiole shape variable but if CI < 80 (a few individuals of *T. nigra*) then petiole more robust (PLI > 50). 10
10. Petiole long and slender, PLI 38–47, PL/HL 0.74–0.92; mesosoma, petiole and postpetiole, when viewed in profile, with scattered erect hairs accom-

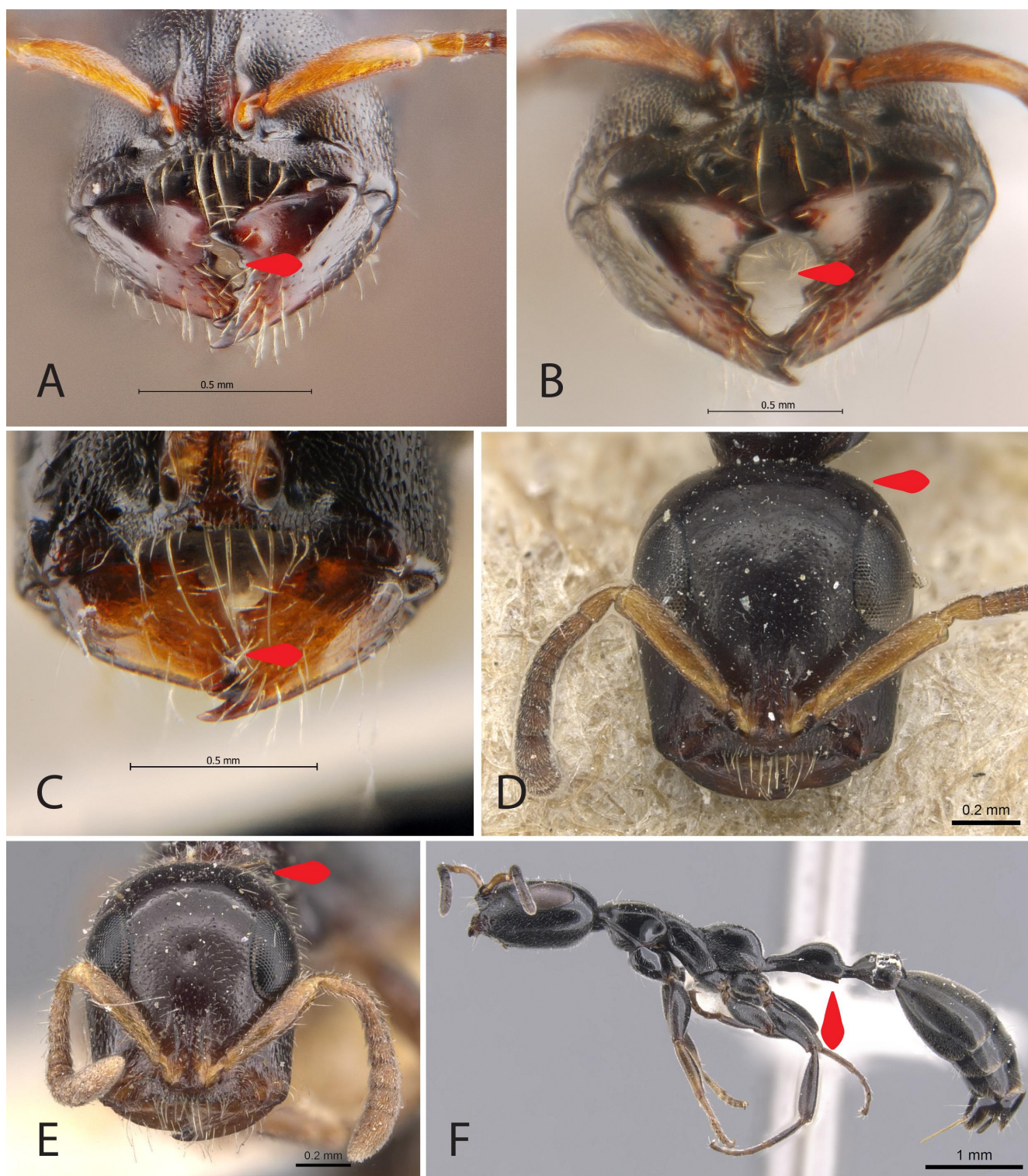


FIGURE 5. Characters used in key. **A–C.** *Tetraponera sirindhornae* sp. nov., mandibles. **A.** Major worker (THNHM-I-00030104); **B.** dealat queen (THNHM-I-00030105); **C.** minor worker (THNHM-I-00030124). **D.** *T. difficilis*, head in full-face view (syntype, CASENT0904040); **E.** *T. aitkenii*, head in full-face view (syntype, CASENT0907455); **F.** *T. notabilis* (holotype, CASENT0902829).

panied by, and often grading into, a dense mat of shorter suberect hairs, present on all dorsal surface *T. attenuata* Smith, 1877
 – Petiole shorter and higher, PLI 52–64, PL/HL 0.57–0.72; mesosoma, petiole and postpetiole, when viewed in profile, with erect hairs and underlying

suberect pubescence variably developed (and variably distinguishable), but at least promesonotum and anterior peduncle of petiole lacking a dense mat of short suberect hairs. *T. nigra* (Jerdon, 1851)

11. Petiole lacking a pair of posteroventral teeth; scape longer than eye length (SI3 102–155). 12
 - Petiole with a pair of acute, posteroventral teeth, formed from ventrolateral extensions of petiolar sternite; scape shorter than eye length (SI3 83–98). 13
12. Along posterior margin of head in full-face with dense erect hairs mixed with decumbent hairs (Fig. 5E). *T. aitkenii* (Forel, 1902)
 - Along posterior margin of head in full-face without dense erect hairs (Fig. 5D). *T. difficilis* (Emery, 1900)
13. Head elongate (CI 73–79); petiole very slender (PLI 43–54). 14
 - Head broader (CI 78–90); petiole much shorter (PLI 60–79). 15
14. Dimorphic; a distinct gap present when mandibles closed in major workers (Fig. 5B); in profile mandible truncate in major workers (Fig. 1A); head relatively shorter in minor worker (CI 70–72); petiolar node (excluding peduncle) almost as long as high in minor worker; posteroventral teeth on petiolar sternite indistinct, present as triangular teeth (Fig. 1A, D). *T. sirindhornae* sp. nov.
 - Monomorphic; without distinct gap when mandibles closed; in profile mandible subtriangular; head relatively longer (CI 73–77); petiolar node (excluding peduncle) clearly longer than high; posteroventral teeth on petiolar sternite distinct, present as sharp teeth (Fig. 5F). *T. notabilis* Ward, 2001
15. Larger species (HW 0.83–0.95), with dense pubescence on postpetiole and gastral tergite I, which obscures the sheen of the integument; frontal carinae more widely separated (MFC 0.12–0.15, FCI 15–16). *T. nodosa* Ward, 2001
 - Smaller species (HW 0.63–0.83), pubescence generally sparser on postpetiole (hairs separated by about their lengths) and varying from sparse to moderately dense on gastral tergite I, not obscuring the sheen of the integument; frontal carinae less widely separated (MFC 0.07–0.10, FCI 10–13). ... *T. nitida* (Smith, 1860)

ACKNOWLEDGEMENTS

We would like to sincerely thank to Yudthana Samung (Mahidol University, Thailand), who helped us in taking ant pictures. This study was partly supported by the Office of Thailand Science Research and Innovation. The animal use protocol (No. FTM-ACUC 001/2024E) was approved by the Faculty of Tropical Medicine – Institutional Animal Care and Use Committee, Mahidol University.

LITERATURE CITED

- AntWeb. 2025. Genus: *Tetraponera* Smith, 1852. AntWeb version v8.113. <https://www.antweb.org/images.do?subfamily=pseudomyrmecinae&genus=tetraponera&rank=genus&project=allantwebants> (25 January 2025).
- Bharti, H. and Akbar, S.A. 2014. *Tetraponera periyarensis*, a new pseudomyrmecine ant species (Hymenoptera: Formicidae) from India. *Asian Myrmecology*, 6: 43–48.
- Bolton, B. 2025. An Online Catalog of the Ants of the World by Barry Bolton. <https://www.antcat.org/catalog/429418> (25 January 2025).
- Jaitrong, W., Suwannaphak, K., Samung, Y. and Jeenthong, T. 2024. *Ants of Thailand* (Second Edition). The National Science Museum, Pathum Thani. 528 pp.
- Khachonpisitsak, S., Yamane, Sk., Sriwichai, P. and Jaitrong, W. 2020. An updated checklist of the ants of Thailand (Hymenoptera, Formicidae). *ZooKeys*, 998: 1–182.
- Ward, P.S. 2001. Taxonomy, phylogeny and biogeography of the ant genus *Tetraponera* (Hymenoptera: Formicidae) in the Oriental and Australian regions. *Invertebrate Taxonomy*, 15: 589–665.
- Ward, P.S. 2006. The ant genus *Tetraponera* in the Afrotropical region: Synopsis of species groups and revision of the *T. ambigua*-group (Hymenoptera: Formicidae). *Myrmecologische Nachrichten*, 8: 119–130.
- Ward, P.S. 2009. The ant genus *Tetraponera* in the Afrotropical region: The *T. grandidieri* group (Hymenoptera: Formicidae). *Journal of Hymenoptera Research*, 18: 285–304.
- Ward, P.S. 2022. The ant genus *Tetraponera* (Hymenoptera: Formicidae) in the Afrotropical region: Taxonomic review and key to species. *Zootaxa*, 5102(1): 1–70. doi:10.11646/zootaxa.5102.1.1.
- Xu, Z. and Chai, Z.-Q. 2004. Systematic study on the ant genus *Tetraponera* F. Smith (Hymenoptera, Formicidae) of China. *Acta Zootaxonomica Sinica*, 29(1): 63–76.