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to Dr. Brown
with the best compliments
of the author.

A New Species of the Ant Genus
Ponera from Yaku Island.
(Hymenoptera, Formicidae)

By MASAHIRO TANAKA

From Japan only two species of the genus *Ponera* have hitherto been known. They are *P. japonica* WHEELER, 1906 and *P. scabra* WHEELER, 1928, both of them are well known to us. The author has collected some *Ponera* specimens from Yaku Is., which must belong to a new third species of the genus from Japan. The species is closely allied to *P. scabra* WHEELER, 1928 of Japan and *P. chapmani* TAYLOR, 1967 of Philippine, and differing from them in the details of sculpturation and others.

Before going further, the author wishes to express his thanks to Prof. RYOZO YOSII of the Kyoto University for the kind advices.

Ponera yakushimensis sp. nov. ✓✓

Types: Three workers (Holo- & two paratypes) and a single dealate female (paratype) with the following data; Ohsugidani (alt. ca. 1200 m.), Yaku Is., Kagoshima Pref., Japan, 5. VIII. 1970, leg. M. TANAKA. All of them were collected together from a small colony found beneath thick moss on *Stewartia monadelphra* SIEB. & ZUCC. (Camelliaceae).

Workers: Having the following dimensions (for explanation of the terms see TAYLOR, 1967, pp. 16-17); Head Length 0.81-0.82 mm., Head Width 0.66-0.68 mm., Scape Length 0.58-0.60 mm., Funicular Length 0.95-0.97 mm., Cephalic Index 81-83, Scape Index 88-89, Weber's Length of Mesosoma 1.05-1.08 mm., Pronotal Width 0.50-0.53 mm., Petiolar Node Length 0.29 mm., Petiole Height 0.53 mm., Dorsal Petiole Width 0.41-0.42 mm., Petiolar Node Index 80-82, Total Length ca. 3.7-3.8 mm.

Closely resembling to *P. scabra* WHEELER, but differing in the following respects.

- (1) Dorsal outline of mesosoma in profile a little more convex, gently arching from the anterior most of pronotum to the posterodorsal border of propodeum (in *scabra*, dorsal outline of mesonotum and propodeum in profile almost horizontal).
- (2) Propodeal declivity slightly less steeply inclined, so that in lateral view posterodorsal border of propodeum making a little more dull angle.

[Ent. Rev. Japan, Vol. XXVII, Nos. 1/2, pp. 32-36, Dec., 1974]

(3) Viewed from above, posterolateral corners of both propodeum and petiole less strongly angled, and the posterior border of node less deeply concave.

(4) Projection on posterodorsal corner of mesepisternum more convex.

(5) Sculpturation: Head shagreened just as in *scabra*, clypeus and mandible also as in *scabra*. Antennal scape closely and finely punctate, but not reticulately sculptured as is in *scabra*. Pronotum closely punctured, but the punctures separated each other by the distance of more than half of the diameter (in *scabra*, shagreened more or less like as on head). Mesonotum and anterior $\frac{2}{3}$ of propodeal dorsum punctate somewhat likewise on pronotum, and on posterior $\frac{1}{3}$ of propodeal dorsum the punctures becoming shallow and sparse (in *scabra*, mesonotum and entire propodeal dorsum closely punctate, partially the punctures more or less arranged longitudinally). Sculptures on lateral surface of meso- and metathorax generally as in *scabra*, but a little sparser. Propodeal declivity strongly shining, upper $\frac{1}{3}$ with scattered few punctures and basal $\frac{1}{4}$ - $\frac{1}{3}$ with a few vestigial transverse striae (in *scabra*, upper $\frac{1}{3}$ of the face punctured more or less like as on propodeal dorsum). Entire mesosoma much more shining. Dorsal face of petiolar node with scattered shallow punctures and strongly shining (in *scabra* closely punctate); upper

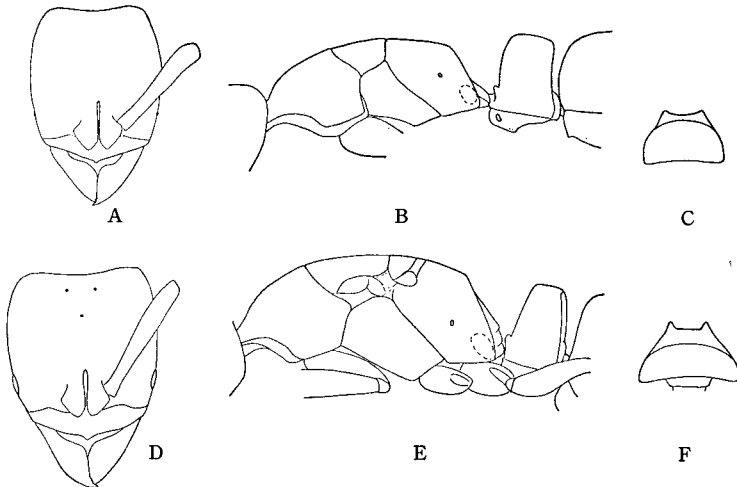


Fig. 1. *Ponera yakushimensis* sp. nov.; A. Head of worker in dorsal view. B. Mesosoma and petiole of worker in lateral view. C. Petiolar node of worker in dorsal view. D. Head of female in dorsal view. E. Mesosoma and petiole of female in lateral view. F. Petiolar node of female in dorsal view.

$\frac{1}{2}$ of anterior face of node much like as the dorsal face, and lower $\frac{1}{2}$ with some minute vestigial transverse striae (in *scabra*, closely and irregularly punctate on upper half, and with transversely arranged punctures on lower half); lateral face like as anterior face; lower $\frac{2}{3}$ of posterior face sculptured generally as in *scabra*, upper $\frac{1}{3}$ almost smooth and shining. First gastric tergite generally as in *scabra*, but a little more shallowly and faintly punctate. Second gastric tergite with far few punctures, space between the punctures strongly shining, on basal portion punctures arranged somewhat transversely, separated from lateral neighbour by the $\frac{1}{2}$ distance of their diameter and separated from anterior and posterior neighbour by more than twice the distance of their diameter; on posterior $\frac{2}{3}$ punctures quite irregularly scattered, on medial $\frac{1}{3}$ they are spaced by 2-5 times the distance of their diameter, and on posterior $\frac{1}{3}$ they are becoming fine and faint, spaced by more than 5 times the distance of their diameter (in *scabra*, entire tergite II closely punctate like as on terg. I). Gastric tergites III-V, sternites and legs much as in *scabra*.

(6) Colour slightly to very slightly lighter on the following portions; clypeus, posterior border of pronotum, sterna of pro- and mesothorax, ventral $\frac{1}{2}$ - $\frac{1}{3}$ of lateral and posterior face of propodeum, subpetiolar process, posterior border of each gastric segment (ferruginous); antennae, legs (yellowish); and mandibles (reddish).

Female: HL 0.89 mm., HW 0.76 mm., SL 0.68 mm., FL 1.05 mm., CI 85, SI 89, WL 1.34 mm., PW 0.63 mm., PNL 0.32 mm., PH 0.58 mm., DPW 0.53 mm., PNI 84, TL ca. 4.4 mm. Differing from the worker in the usual characters of full sexuality and in the following respects: Sculpturation slightly heavier, dorsum of mesosoma slightly more convex, petiolar node relatively thinner, posterior face of node more deeply concave and posterolateral border of node a little more strongly angled.

It differs from the female of *P. scabra* WHEELER in following respects.

(1) Dorsal outline of mesosoma in profile a little more convex, gently arching from the anterior most of pronotum to the posterodorsal border of propodeum.

(2) Mesosoma and petiole more shining.

(3) Sculpturation: Propodeal dorsum much more shining, median portion of anterior $\frac{2}{3}$ and most of posterior $\frac{1}{3}$ with scattered few punctures and strongly shining, the rest of the dorsum closely punctate as pronotum (in *scabra*, entire dorsum of propodeum closely punctate, subopaque). Upper $\frac{1}{4}$ of the declivitous face of propodeum with scattered punctures separated one another by 2-4 times the distance of the diameter, and the space between the punctures smooth and strongly

shining; lower $\frac{1}{4}$ with some 4 transverse striae and the rest of the face (median $\frac{1}{2}$) almost smooth and strongly shining (in *scabra*, upper $\frac{1}{3}$ closely punctate more or less like as on propodeal dorsum and lower $\frac{2}{3}$ with some 10 vestigial transverse striae). The rest of mesosoma and entire head sculptured much as in *scabra*. Gaster generally as in *scabra*, but with a little more distinct scaly appearance, and the space between the punctures more shining.

(4) Colour of legs slightly lighter, somewhat yellowish.

There is another *Ponera* species closely allied to the present new one. It is *P. chapmani* TAYLOR, 1967 of Philippine, and from its original description the present new species differs in the following respects.

Worker :

(1) Mandible with 3 distinct dents occupying apical $\frac{2}{5}$ of masticatory border, rest of the border with indistinct 7-8 denticles (in *chapmani*, 3 large dents occupying apical $\frac{1}{2}$, rest of the border with 5-6 denticles).

(2) Compound eyes situated 0.77-0.80 the distance from lateral occipital border to midpoint of anterior genal border (in *chapmani*, situated approximately 0.85 the distance from lateral occipital border to midpoint of anterior genal border).

(3) Petiolar node viewed from above, shallowly but apparently concave posteriorly, not oval in any sense (almost oval in *chapmani*).

(4) Sculpturation of the gastric tergite II is different from that of the terg. I, much more sparsely punctate and strongly shining (similar to terg. I in *chapmani*).

Female :

(1) Compound eyes smaller (Ocular Index 22.3 opposed to 29-30 in *chapmani*) and situated about 0.76 their maximum diameter from midpoint of anterior genal border (in *chapmani*, situated $\frac{1}{3}$ - $\frac{1}{2}$ their maximum diameter from midpoint of anterior genal border).

(2) Petiolar node relatively broader (Petiolar Node Index 83 opposed to 74-76 in *chapmani*) and if seen from above, distinctly concave posteriorly (more or less transversely elongate oval in *chapmani*).

Reference

- TAYLOR, R. W., 1967; A monographic revision of the ant genus *Ponera*. Pacific Ins. Mon., 13: 1-109.
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摘 要

本新種は本邦に産する *Ponera scabra* WHEELER, 1928 (テラニシハリアリ) に極めて近似する。その顕著な相違点は、頭部を除き全体に点刻が比較的少なく（ことに第2腹背板

においては最も顕著), 光沢に富むことである。また, フィリピンに産する *Ponera chapmani* TAYLOR, 1967 にも類似するが, やはり第2腹背板の Sculpturation の相違等により区別できる。なお, 本邦からもう1種 *Ponera japonica* WHEELER, 1906 (ヒメハリアリ) が知られているが, この種は小形であるので (Total Length, worker ca. 2.7 mm, female ca. 3.3 mm) 容易に識別できる。模式産地は鹿児島県屋久島大杉谷 (標高約1,200 m)。ヒメシャラに付着したコケの下から採集した。和名はその産地名を冠してヤクシマハリアリとしたい。

New record for distribution of

トカラウロコアリの新分布

田 中 将 宏
tokarajurokoari, ^{ant} Trichoscapa

トカラウロコアリ *Trichoscapa membranifera* EMERY, 1869 (Ann. Accad. Aspir. Nat. Napoli, 2: 24) は, 合衆国南部から中国大陸東南部まで広く熱帯・亜熱帯の太平洋地域に分布する。BROWN (1949) はその論文 Revision of the Ant Tribe Dacetini, Fauna of Japan, China and Taiwan (Mushi, 20: 1-25) において本種が本邦の温暖な地方から発見されることを予想し, その予想の通り最初の報告はトカラ列島中之島から1954年宮本正一氏によってなされた (新昆虫, 7 (2): 28)。続いて同じ年に岡本啓氏により高知県から報じられている (げんせい, 3: 47) が, それ以後本種の本邦における分布に関する報告を見ない。

筆者は本種を和歌山県白浜の京都大学瀬戸臨海実験所構内において採集した。本州からは最初の記録である。

9 workers, in the Campus of the Seto Marine Biological Laboratory, near Shirahama, Wakayama Pref., Japan, 31. V. 1974, M. TANAKA leg.

なお, 京都大学の森下正明教授から個人的に伺ったところによると, 沖縄においても本種らしいものが採集されているとのことであり, 他にも未報告のものが幾例かあるものと思われる。ご教示いただいた森下教授に謝意を表したい。