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**The Subgenus *Paramyrmamblys* of the Genus *Camponotus*
(Insecta: Hymenoptera: Formicidae) from Japan,
with a Description of a New Species**

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The Subgenus *Paramyrmamblys* of the Genus *Camponotus* (Insecta: Hymenoptera: Formicidae) from Japan, with a Description of a New Species

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Abstract. Two Japanese species of the subgenus *Paramyrmamblys* of the genus *Camponotus* are recognized: *Camponotus (Paramyrmamblys) amaianus* sp. nov. and *C. (P.) kiusiuensis* Santschi. A distribution map to these species is given.

Introduction

In the course of my recent study of the Japanese Formicidae, I have examined several specimens of the subgenus *Paramyrmamblys* of the genus *Camponotus* from Japan. As a result, I recognized two species of the *Paramyrmamblys* and confirmed that one of them was new to science. In this short report, I will briefly review the Japanese species of the *Paramyrmamblys* with a description of a new species.

Family Formicidae

Genus *Camponotus* Mayr, 1861

Camponotus (Paramyrmamblys)

amaianus sp. nov.

[Japanese name: Tsuya-mikado-ôari]

(Figs. 1A-F)

Description. Major worker. Head length 2.9–3.3 mm; head width 2.8–3.3 mm; scape length 2.1–2.7 mm; cephalic index 77–103; scape index 72–86; Weber's length of alitrunk 3.6–4.2 mm; dorsal pronotal width 1.7–2.0 mm; petiole height 1.0–1.2 mm; dorsal petiole width 0.8–0.9 mm; total body length 11–13 mm. (five individuals were measured.)

Head almost as long as wide, with weakly convex sides and concave occipital border in frontal view. Mandibles strong, with five stout teeth. Anterior border of clypeus weakly concave. Eyes flat, 0.55–0.63 mm in maximum diameter, located at upper 3/5 of head. Antennal scapes exceeding the occipital border.

General form of alitrunk and petiole as in

Fig. 1B. Dorsal outline of alitrunk in profile convex, arching from the anterior most of pronotum to the posterodorsal border of propodeum; posterodorsal corner of propodeum rounded, not forming an angle. Metanotal-propodeal suture distinct on the dorsal surface and indistinct on the lateral surface. Petiolar scale thick, emarginated at top; in lateral view, lower 1/2 of anterior and posterior borders almost parallel, upper 1/2 of anterior border convex; in dorsal view, 1.5 times as broad as long.

Erect or suberect hairs present in each dorsum as follows: 2–3 pairs mesonotum, 2–4 propodeum, 2–4 petiolar scale. On the head erect or suberect hairs present on occipital area (1 pair), on vertex (1 pair), on frons near the frontal carina (2 pairs), and on clypeus (10–14). Mandibles with subdecumbent hairs. Two rows of long erect hairs present each on gastric tergites I–IV (one on middle and other on posterior margins).

Jet-black in general color and shiny. Legs dark brown to reddish brown; mandibles, lower 1/2 of clypeus, and gular area dark reddish brown.

Minor worker. Head length 1.7–1.8 mm; head width 1.3–1.4 mm; scape length 2.2–2.3 mm; cephalic index 74–79; scape index 164–177; Weber's length of alitrunk 2.5–2.7 mm; dorsal pronotal width 1.1–1.2 mm; petiole height 0.5–0.6 mm; dorsal petiole width 0.4–0.5 mm; total body length 6–8 mm. (five individuals were measured.)

Head longer than broad, with almost parallel sides and convex occipital border in frontal view; posterolateral corners not angulated. Mandibles with five teeth, apical tooth acute

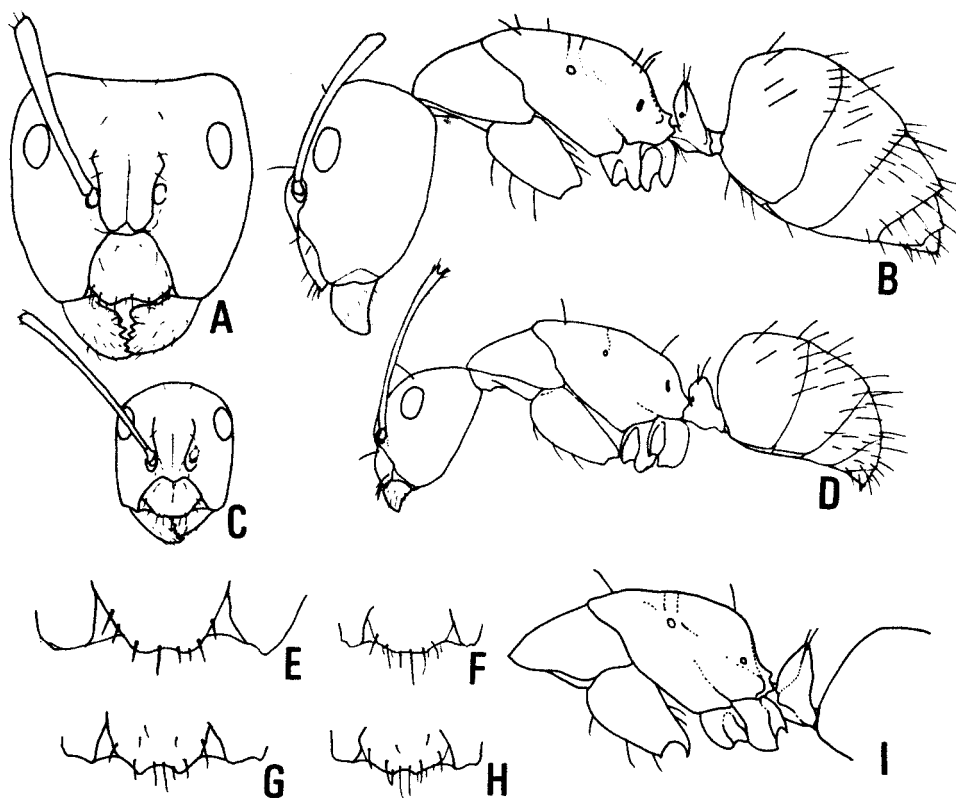


Fig. 1. A-F, *Camponotus (Paramyrmamblys) amamianus* sp. nov.; G-I, *C. (Paramyrmamblys) kiusiuensis*—A, major worker, head, frontal view; B, major worker, total aspect, lateral view; C, minor worker, head, frontal view; D, minor worker, total aspect, lateral view; E, G, major worker, anterior border of clypeus; F, H, minor worker, anterior border of clypeus; I, major worker, alitrunk and petiole, lateral view.

and most pronounced. Clypeus straight to weakly concave anteriorly. Antennal scapes long, exceeding the occipital border by about $2/3$ of their length. Eyes weakly prominent, 0.40–0.45 mm in maximum diameter, located in upper $2/3$ of head.

Alitrunk and petiole as in Fig. 1D. Dorsal outline of alitrunk in profile convex; posterodorsal corner of propodeum rounded. Metanotal-propodeal suture obsolescent on the dorsal surface and indistinct on the lateral surface. Petiolar scale broad; in lateral view, lower $1/2$ of anterior border straight, upper $1/2$ of anterior border convex, posterior border almost straight.

Erect hairs present in each dorsum as follows: 1 pair mesonotum, 1 pair propodeum, 2 pairs petiolar scale. On the head erect or suberect

hairs present on vertex (1 pair), on frons near the frontal carina (1 pair), on posterior margins (1 pair) and anterior margins of clypeus (6–8). Mandibles with subdecumbent hairs. Two rows of long erect hairs present each on gastric tergites I–IV.

Jet-black in general color and shiny. Mandibles, clypeus, and legs blackish brown.

Type series. Holotype: Major worker, Sumiyoson, Amami-oshima Is., Kagoshima Pref., Japan, 1. VII. 1983, M. Terayama leg. Paratypes: 31 workers (from the same nest as holotype); 1 worker, Uken-son, Amami-oshima Is., Kagoshima Pref., Japan, 12. VII. 1981, S. Ohshima leg.; 3 workers, Mt. Yuwan-dake, Amami-oshima Is., Kagoshima Pref., Japan, 5. VIII. 1982, H. Takamine leg.; 2 workers, Mt. Yuwan-dake, Amami-

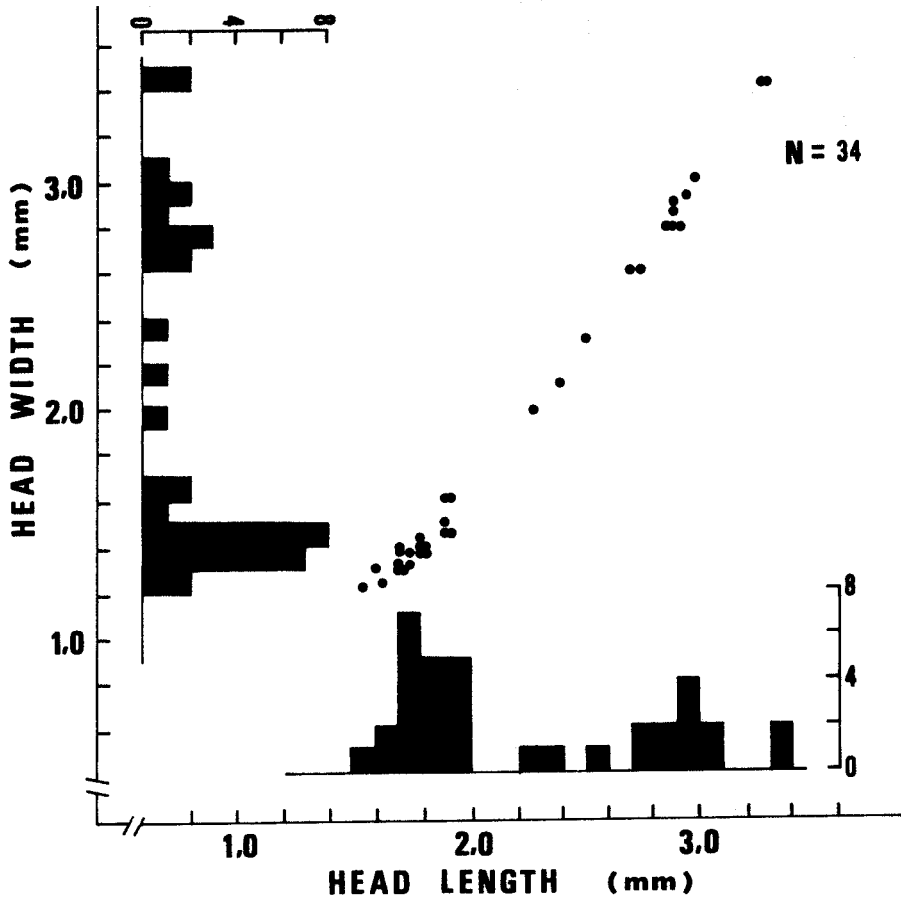


Fig. 2. Head width-head length relationship of *Camponotus (Paramyrmamblys) amamianus* sp. nov. worker. Relationship is defined as follow: $\text{Log}Y = 1.42 \log X - 0.62$ ($r = 0.995^{**}$), where Y is the head width, and X is the head length.

oshima Is., Kagoshima Pref., Japan, 16. VII. 1963, Y. Kurosawa leg.

Type depository. The holotype and some paratypes are deposited in the National Institute of Agro-Environmental Sciences, Tsukuba, and the other paratypes in the National Science Museum, Tokyo, and the Osaka Museum of Natural History.

Distribution. Japan (Amami-oshima Is.)

Remarks. This new species resembles *Camponotus (Paramyrmamblys) kiusiuensis* Santschi, but differs from it by rounded posterolateral corner of propodeum, more steeply inclined propodeal dorsum, and jet-black color of body.

The workers of the species indicate a polymorphism, the size-frequency curve shows weakly

bimodal (Fig. 2). The colony was nesting in the hollow of a trunk of *Quercus glauca*.

Camponotus (Paramyrmamblys) kiusiuensis
Santschi

[Japanese name: Mikado-ôari]
(Figs. 1G-I)

Camponotus (Paramyrmamblys[!]) kiusiuensis Santschi, 1937, Bull. Ann. Ent. Belg., 77: 379.

Material examined. 50 colonies from the following localities in Japan:—Tochigi Pref.: Utsunomiya-shi, Tochigi-shi.—Chiba Pref.: Abiko-shi, Futtu-shi, Mt. Kiyosumi-yama.—Saitama Pref.: Kumagaya-shi, Higashi-matsuyama-shi, Mt. Bukô-zan.—Tokyo Pref.: Okutama-machi, Hino-

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de-machi, Machida-shi.—Kanagawa Pref.: Kawasaki-shi, Yokohama-shi, Zu-shi, Sagami-hara-shi, Manazuru-machi, Ashigara-kami-gun, Mt. Nabewari-yama.—Shizuoka Pref.: Shimoda-shi, Shimizu-shi.—Ishikawa Pref.: Kaga-shi.—Yamanashi Pref.: Sudama-cho.—Nagano Pref.: Matsumoto-shi.—Mie Pref.: Yokkaichi-shi, Nabari-shi, Inabe-

machi, Komono-machi, Geinou-machi.—Osaka Pref.: Osaka-shi.—Hyogo Pref.: Kobe-shi, Kawanishi-shi.—Okayama Pref.: Akasaka-machi.—Hiroshima Pref.: Aki-gun.—Shimane Pref.: Mitomachi.—Yamaguchi Pref.: Akiyoshi-machi.—Kagoshima Pref.: Mt. Kurino-dake, Yakushima Is.

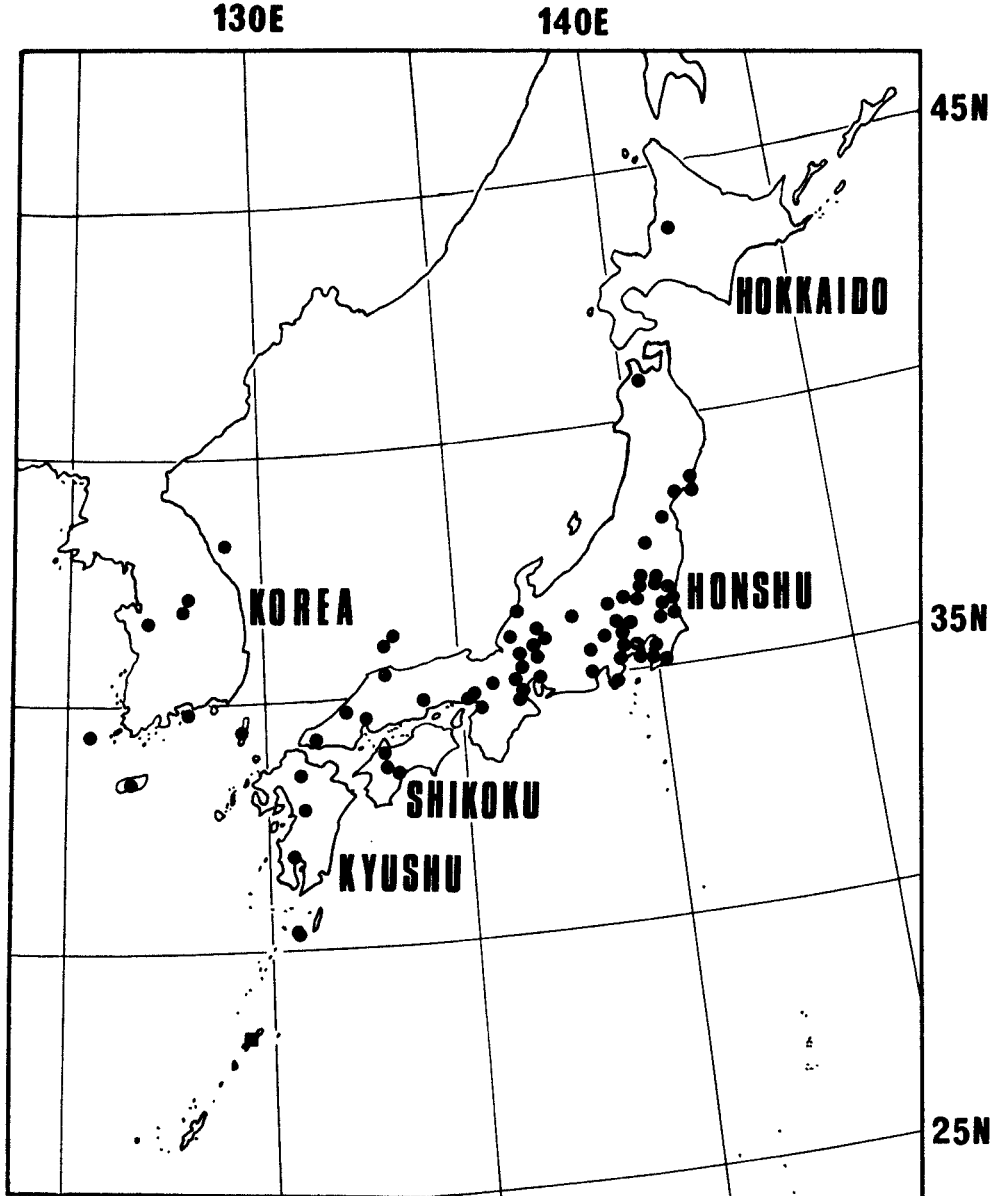


Fig. 3. Geographical distributions of *Camponotus amamianus* (■) and *C. kiusiuensis* (●).

The subgenus *Paramyrmamblys* of the genus *Camponotus* from Japan

Distribution. Japan, Korea.

Remarks. This species nests in hollow dead branches, fallen woods, or bamboo grasses. The ecological study have made by Ito *et al.* (1988).

Geographical notes

The subgenus *Paramyrmamblys* is represented by only two species, *C. kiusiuensis* and *C. amamianus*, in Asia (Chapman & Capco, 1951). *C. kiusiuensis* is distributed from Hokkaido through Honshu, Shikoku, Kyushu to Yakushima Island in Japan, and in South Korea (Choi *et al.*, 1985). This species is rare in Hokkaido, known only a single record from Fukagawa-shi, Sorachi (Kogure, 1957; Azuma, 1958). However this is rather common from northern Honshu to Kyushu. While, *C. amamianus* is restricted to evergreen broad-leaved forests of Amami-oshima Island, southern Japan (Fig. 3).

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日本産オオアリ属 (*Camponotus*) のミカドオオアリ亜属 (*Paramyrmamblys*) のアリについて (昆虫綱, ハチ目, アリ科)

寺山 守

日本各地から得られたオオアリ属 (Genus *Camponotus*) に含まれるミカドオオアリ亜属 (Subgenus *Paramyrmamblys*) の標本を点検した結果, 2種が認められ, 内1種を新種として *Camponotus* (*Paramyrmamblys*) *amamianus* (和名: ツヤミカドオオアリ) の名のもとに記載した。本亜属に含まれる2種の内, *C. kiusiuensis* は日本及び朝鮮半島に分布し, 日本では北海道から屋久島まで広く分布が認められた。一方, *C. amamianus* は奄美大島のみ分布し, 常緑樹林内の立木の洞中に営巣する。

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