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(Hymenoptera: Formicidae)

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## The Ant Genera *Epitritus* and *Kyidris* from Taiwan (Hymenoptera: Formicidae)

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**ABSTRACT** Two new species of ants, *Epitritus formosus* and *Kyidris takasago*, are described and illustrated. *Epitritus hirashimai* OGATA, 1990, is recorded for the first time from Taiwan.

The ant genera *Epitritus* EMERY and *Kyidris* BROWN, both belonging to the tribe Dacetoniini of the subfamily Myrmicinae, are represented by 8 and 3 described species, respectively (BOLTON, 1983; OGATA, 1990; WILSON & BROWN, 1956). The genus *Epitritus* is distributed from the tropical to warm-temperate regions of the world, and the genus *Kyidris* from New Guinea through Indonesia and Taiwan to Japan.

In the course of our study on the ant fauna of Taiwan, we have examined a series of specimens of these genera. As a result, we recognized three species of *Epitritus* and two species of *Kyidris*. Of these, two are new to science and one is new to the Taiwanese fauna. In this paper, these three species are added to the ant fauna of Taiwan.

The measurements and indices used in this paper follow those in TARAYAMA and KUBOTA (1989).

### *Epitritus formosus* sp. nov.

(Figs. 1–4)

Holotype. Female. HL 0.35 mm; HW 0.40 mm; SL 0.23 mm; ML 0.13 mm; CI 114; SI 58; MI 37; WL 0.48 mm; AW 0.28 mm; TL 1.5 mm.

Head wider than long, widest at about the midlength, with shallowly convex posterior border in frontal view; frons microreticulate, with 15 appressed large orbicular hairs; vertex microreticulate, hairless. Mandibles slender in frontal view; apical half of inner margin with 4 minute teeth, of which basalmost largest; apical-most with 2 small teeth, one at dorsal and the other at ventral. Clypeus wider than long, with transverse anterior border. Antennae with 6 segments; scape with a large anteriorly projecting subbasal lobe at the bent, anterior margin with a row of spoon-shaped hairs; 2nd segment longer than wide; 3rd and 4th segments each wider than long; 5th slightly longer than wide, and apical  $3.0\times$  as long as wide. Compound eyes moderately prominent, 0.06 mm in diameter. Ocelli small, forming an obtuse triangle.

Dorsal outline of alitrunk straight in profile; pronotum weakly microreticulate; meso-metanotum microreticulate and scattered with short erect hairs. Propodeal

lamellae moderately developed; upper posterior corner acute. Petiolar disc rectangular in dorsal view,  $1.67\times$  as broad as long, with subdecumbent short hairs; postpetiolar disc  $2.28\times$  as broad as long, with a pair of erect hairs and some subdecumbent hairs.

First gastral tergite with 3 transverse rows of long erect hairs, and many decumbent, curved, and short hairs; 2nd and 3rd tergites each with a transverse row of long erect hairs, and many decumbent, curved, and short hairs.

Ground color yellow; ocellar triangular area blackish brown.

*Types.* Holotype: Female, Tapeng-Meizilin (alt. 510 m), Nantou Hsien, 30. VII. 1988. Paratype: One female, same data as holotype.

*Type depository.* The types are preserved in the collection of the National Institute of Agro-Environmental Sciences, Tsukuba, Japan.

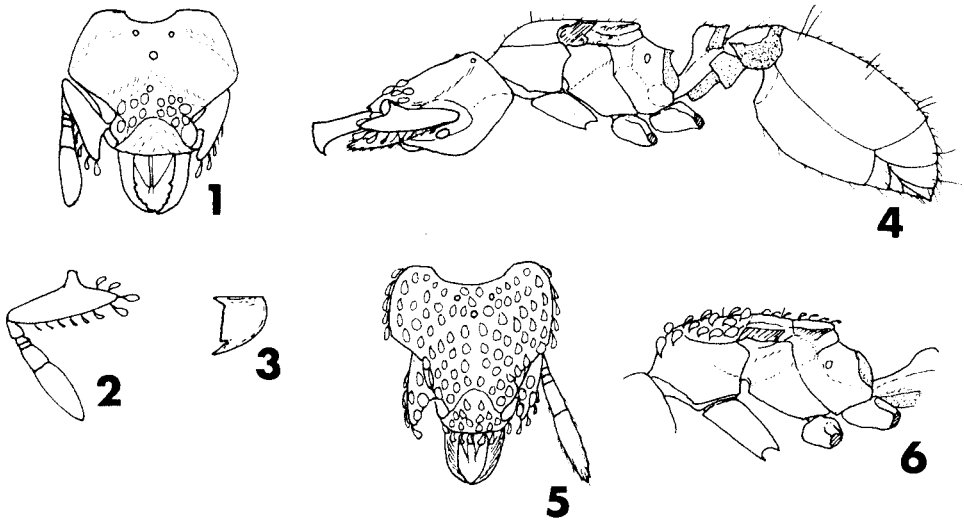
*Remarks.* This species resembles *E. hirashimai*, but is easily separable from the latter in female by the absence of large flattened hairs on vertex and mesonotal dorsum (in *hirashimai* large flattened hairs abundant on dorsa of head and mesonotum; Figs. 5–6), the absence of spoon-shaped hairs on dorsum of metanotum (in *hirashimai* with small spoon-shaped hairs), and acute upper posterior corner of propodeal lamellae (in *hirashimai* upper posterior corner of propodeal lamellae rounded).

*Epitritus hirashimai* OGATA, 1990

(Figs. 5, 6)

*Epitritus hirashimai* OGATA, 1990, p. 197.

*Specimen examined.* One female, Wulai, Taipei Hsien, 14. X. 1994, C.-C. LIN leg.



Figs. 1–4. *Epitritus formosus* sp. nov. (female).—1, Head, frontal view; 2, antenna; 3, mandible; 4, alitrunk, petiole and postpetiole, lateral view.

Figs. 5, 6. *Epitritus hirashimai* OGATA (female).—5, Head, frontal view; 6, alitrunk, petiole and postpetiole, lateral view.

*Distribution.* Japan, Taiwan (New record).

*Remarks.* There is no significant morphological difference between the Taiwanese and Japanese specimens in female.

***Epitritus hexamerus* BROWN, 1958**

*Epitritus hexamerus* BROWN, 1958, p. 70.

*Specimens examined.* One worker, Chihpen, Taitung Hsien, 24. VII. 1982, M. TERAYAMA leg.; 1 worker, Nanshanchi, Nantou Hsien, 13. VIII. 1985, M. TERAYAMA leg.; 12 workers, 18. VIII. 1987, Liukuei, Kaohsiung Hsien, S. KUBOTA leg.; 1 female, Kending, Pintung Hsien, 26. IV. 1992, C.-C. LIN leg.

*Distribution.* Japan, Taiwan, Korea.

***Kyidris takasago* sp. nov.**

(Figs. 7-9)

*Holotype.* Worker. HL 0.55 mm; HW 0.43 mm; SL 0.32 mm; ML 0.15 mm; CI 78; SI 74; MI 27; WL 0.55 mm; AW 0.31 mm; TL 2.2 mm.

Head triangular, with convex posterior border in frontal view; cephalic dorsum microreticulate with many short decumbent hairs; a single pair of standing spoon-shaped hairs at the highest point of the vertex. Mandibles relatively long and moderately arcuate in frontal view, with a series of minute teeth. Clypeus longer than wide, with well convex anterior border; dorsum with many short decumbent hairs. Antennae with 6 segments; scape long, anterior border with a row of spatulate hairs; 2nd segment longer than wide; 3rd and 4th segments each almost as long as wide; 5th broadest at posteriormost,  $1.75\times$  as long as wide; apical segment  $4.0\times$  as long as wide. Eyes small, consisting of 8 ommatidia.

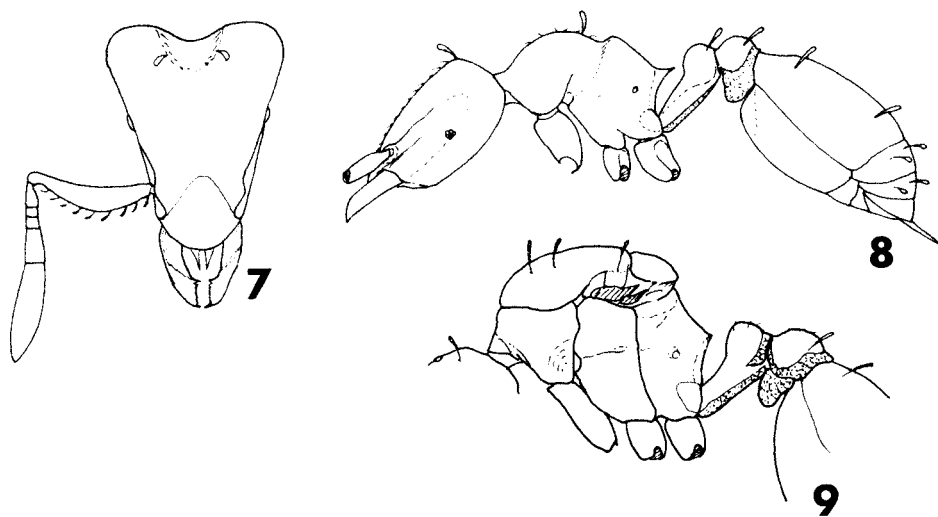
General form of alitrunk, petiole and postpetiole as shown in Fig. 8; promesonotum with short decumbent hairs sparsely; in dorsal view, anterolateral borders rounded, not forming an angle; posterior portion with a pair of standing spoon-shaped hairs; metanotal groove moderately depressed; propodeum with acute spines dorsolaterally. Petiole long and slender, with a round node; ventral border with a thin long spongiform lamella. Dorsal border of postpetiole broadly rounded. Pedicels each with a pair of standing spoon-shaped hairs.

First gastral tergite with 2 pairs of standing spoon-shaped hairs, one pair on the anterior portion and the other on the posterior portion; 2nd and 3rd tergites each with a row of 4 standing spoon-shaped hairs.

Color yellow.

*Paratypes.* Workers. Ten workers with the following measurements and indices: HL 0.55-0.59 mm; HW 0.50-0.52 mm; SL 0.33-0.35 mm; ML 0.15-0.16 mm; CI 85-95; SI 63-70; MI 25-29; WL 0.56-0.60 mm; AW 0.33-0.35 mm; TL 2.2-2.3 mm. Female. HL 0.70 mm; HW 0.63 mm; SL 0.43 mm; ML 0.17 mm; CI 90; SI 68; MI 24; WL 0.93 mm; AW 0.47 mm; TL 2.9 mm.

General shape of head as in worker with the usual caste differences. Alitrunk in profile with gently convex dorsal border; promesonotum and scutellum with many short decumbent hairs; 3 pairs of standing spoon-shaped hairs present on mesonotum; mesopleura smooth and shining; propodeum smooth and shining, with dull angulations posterodorsally; propodeal lamellae weakly developed. Petiole



Figs. 7-9. *Kyidris takasago* sp. nov. (worker and female).—7, Worker, head, frontal view; 8, worker, profile, lateral view; 9, female, lateral view.

long, wish round node; ventral border with a low spongeform appendage. Postpetiole with a pair of standing spoon-shaped hairs.

First gastral tergite with 2 pairs of standing spoon-shaped hairs, one at anterior portion and the other at near posterior border. Second and 3rd gastral tergites each with a transverse row of 4 standing spoon-shaped hairs.

Color yellow.

*Types.* Holotype: Worker, Huisunlinchang, Nantou Hsien, 14. XI. 1992, C.-C. LIN leg. Paratypes: One female, 170 workers, same colony as holotype.

*Type depository.* The holotype is deposited in the collection of the National Institute of Agro-Environmental Sciences, Tsukuba, Japan, and paratypes in the Taiwan Agricultural Research Institute, Taichung, and the National Taiwan University, Taipei.

*Remarks.* The present species is easily distinguished from the other congeners by the presence of standing spoon-shaped hairs on 1st to 3rd gastral tergites and acute propodeal spines in worker, and presence of standing spoon-shaped hairs on mesonotum, postpetiole, and 1st to 3rd gastral tergites in female.

### *Kyidris mutica* BROWN, 1949

*Kyidris mutica* BROWN, 1949, p. 3.

*Kyidris n. da* BROWN, 1949, p. 23. [Syn. BROWN, 1952.]

*Polyhomoa itoi* AZUMA, 1950, p. 37. [Syn. BROWN & YASUMATSU, 1951.]

*Specimens examined.* Sixteen workers, Nanshanchi, Nantou Hsien, 26. VII. 1986, M. TERAYAMA leg.; 20 workers, same locality, 29. VII. 1990, M. TERAYAMA leg.; 1 female, Fushan Botanical Garden, Yilan Hsien, 6. XI. 1992, C.-C. LIN leg.

*Distribution.* Japan, Taiwan, Korea, Java.

## 摘 要

寺山 守 (東京大学教養学部生物学教室), 林 宗岐・呉 文哲 (台湾大学植物病虫害学系)——台湾産セダカウロコアリ *Epitritus* 属とスカウロコアリ *Kyidris* 属について.

セダカウロコアリ属は世界に8種が, スカウロコアリ属はニューギニアから日本にかけて3種がこれまでに知られている. このたび, 台湾産のこれらの属の標本を点検した結果, セダカウロコアリ属には3種が, スカウロコアリ属には2種が含まれていることが判明した. これら5種の内の2種は新種と判断され, *Epitritus formosus* 及び *Kyidris takasago* の名のもとに記載した. また, *Epitritus hirashimai* を台湾から初めて報告した.

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