

A New Species of the Ant Genus *Epitritus* Emery (Hymenoptera: Formicidae) from China

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Abstract: A new species of the ant genus *Epitritus* Emery, *E. dayui* sp. nov., is collected in Xishuangbanna Nature Reserve, Yunnan Province, China. Up to date, 4 species of the genus are known in China: *E. hexamerus* Brown, *E. formosus* Terayama, Lin et Wu, *E. hirashimai* Ogata, and *E. dayui* sp. nov. A key based on worker and female castes is proposed for the 4 known species of *Epitritus* of East Asia.

Key words: Hymenoptera, Formicidae, *Epitritus*, new species, Yunnan, China

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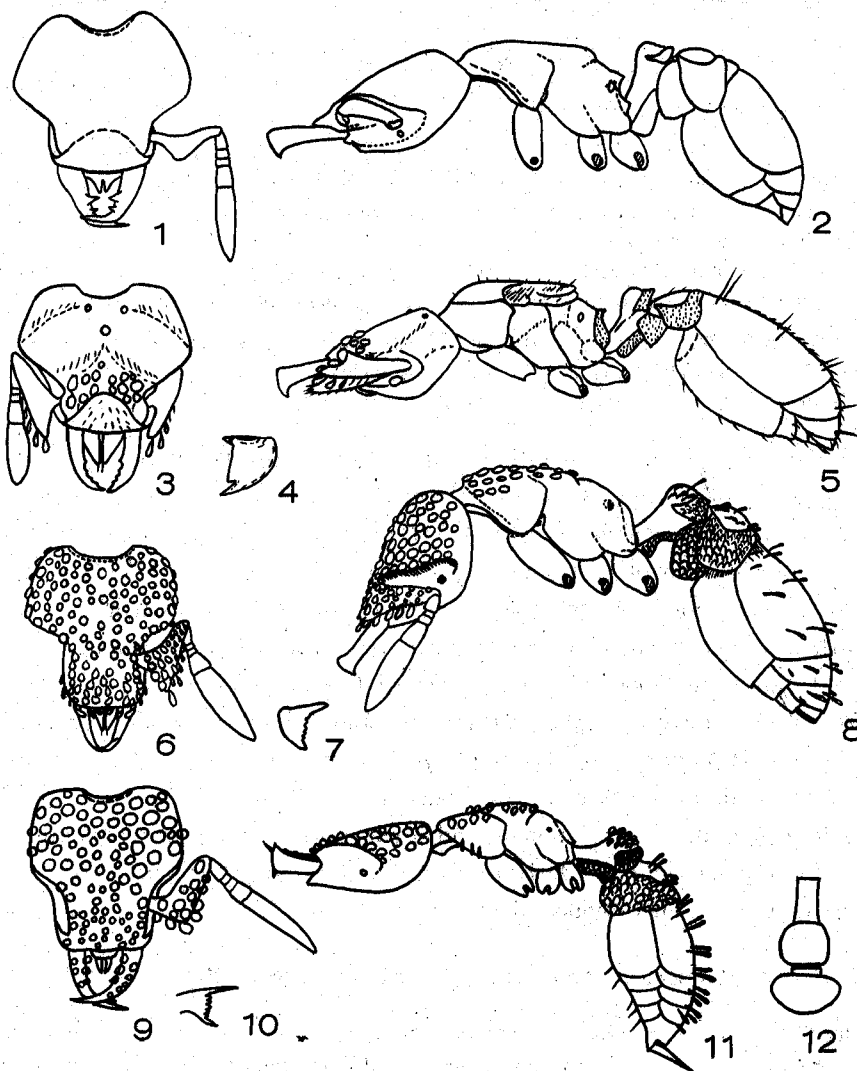
The ant genus *Epitritus* Emery is distributed in the Old World Tropics and Temperate. According to Bolton (1995), 8 species are recorded in the world; 4 from Africa, 1 from Europe, 3 from Asia. Terayama et al. (1995) described another new species of the genus, *E. formosus*, from Taiwan of China and reported the distribution of *E. hirashimai* Ogata in Taiwan as a new record. At the end of 1995, 3 species are known in East Asia: *E. hexamerus* Brown from Japan, South Korea and Taiwan of China (Ogata et al., 1992), *E. hirashimai* Ogata from Japan (Ogata, 1990) and Taiwan of China, *E. formosus* Terayama, Lin et Wu from Taiwan of China. During the study of ant biodiversity of Xishuangbanna Nature Reserve of Yunnan Province, an *Epitritus* species new to science is discovered and described. Up to date, 4 species of the genus are known in China.

Standard measurements, indices and their abbreviations are as defined in Bolton (1983). The type specimen is deposited in the Insect Collection, Southwest Forestry College, Kunming, Yunnan Province, P. R. China.

Key to species of *Epitritus* of China (worker and female castes)

1. Inner margin of mandible armed with teeth. Propodeum toothed 2
 Inner margin of mandible unarmed. Propodeum rounded, without teeth 3
2. Inner margin of mandible armed with 2 spine-like teeth. Subbasal lobe of antennal scape formed an obtuse angle (Figs. 1~2) (China; Taiwan; South Korea; Japan) *E. hexamerus* Brown
 Inner margin of mandible armed with 4 tiny denticles. Subbasal lobe of antennal scape formed an acute

- angle (Figs. 3~5) (China; Taiwan) *E. formosus* Terayama, Lin et Wu
3. Subbasal lobe of antennal scape formed an acute angle. Spine-like teeth of mandible short, the basal tooth shorter than the masticatory margin. In profile view dorsum of alitrunk evenly convex (Figs. 6~8) (China; Taiwan; Japan) *E. hirashimai* Ogata
- Subbasal lobe of antennal scape formed a right angle. Spine-like teeth of mandible long, the basal tooth as long as the width of the masticatory margin. In profile view dorsum of alitrunk strongly convex (Figs. 9~12) (China; Yunnan) *E. dayui* sp. nov.



Figs. 1~12 *Epitritus* workers and females

1~2. *E. hexamerus* Brown, worker; 3~5. *E. formosus* Terayama, Lin et Wu, female; 6~8. *E. hirashimai* Ogata, worker; 9~12. *E. dayui* sp. nov., worker. 1, 3, 6, 9. Head in full face view; 2, 5, 8, 11. Body in profile view; 4, 7, 10. Apex of mandible in front view; 12. Petiole and postpetiole in dorsal view. 1~2. After Ogata and Onoyama (1992); 3~5. After Terayama et al. (1995); 6~8. After Ogata (1990). Pilosity omitted from figs. 1~2

Epitritus dayui, sp. nov. (Figs. 9~12)

Holotype worker: TL 2.6, HL 0.63, HW 0.60, CI 96, SL 0.28, SI 46, PW 0.33, AL 0.70, ED 0.04. Head about as broad as long, anterior half distinctly narrower than the posterior half. Occipital margin roundly incised in the middle. Occipital corners rounded. Mandibles slender and roundly curved, masticatory margin with 7 teeth, the basal and apical teeth elongate and spine-like, the basal tooth about as long as the width of the masticatory margin, the apical tooth about as long as half length of the basal one. The other 5 teeth between the basal and apical ones minute. Labrum visible, anterior margin with a pair of cone-like projections. Anterior margin of clypeus nearly straight, slightly convex in the middle. Antenna with 6 segments. Scape depressed, subbasal lobe nearly formed a right angle. The 3rd and 4th segments small and about equal, length of the two segments combined about equal to length of the 2nd and 5th ones. The apical segment very long, about 1.5 times as long as the rest of the flagellum. Eye minute, with 4 facets. Promesonotum relatively flat, mesonotum rounded and lowered down posteriorly. Promesonotal suture fine and distinct. Metanotal groove shallowly depressed. Propodeum slope-like and weakly convex. Propodeal lobe blunt at apex. Dorsum of petiolar node roundly convex. Dorsum of postpetiolar node evenly convex. In dorsal view, petiolar node about square, postpetiolar node broader than long and about semicircular, petiolar node width:postpetiolar node width = 2:3. Lateral sides of declivity of propodeum with spongiform longitudinal ridges. Ventral face of petiole, ventral and posterior faces of postpetiole with spongiform appendage. Head, alitrunk and petiolar node densely and finely punctured, dim. Lateral sides of mesonotum and metanotum, postpetiolar node and gaster smooth and shining. Head, mandibles, scapes, alitrunk, petiolar node, dorsal face of femora and tibiae with circular or subcircular flattened hairs. Lateral sides of pronotum, postpetiolar node and gaster with clavate hairs. Ventral face of head, mandibles, flagella, legs and ventral face of gaster with dense decumbent pubescence. Body in color yellowish brown, gaster dark yellowish brown.

Holotype: worker, No. A97-2677, 1380m, monsoon evergreen broad-leaf forest, Nangongshan Mountain, Mengla County, Yunnan Province, 16-IX-1997, collected by XU Zhenghui.

This new species is close to *E. hirashimai* Ogata, but mandible with slender spine-like teeth, the basal tooth as long as width of masticatory margin; subbasal lobe of antennal scape formed a right angle; in profile view dorsum of alitrunk strongly convex.

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中国圆鳞蚁属一新种记述

(膜翅目: 蚁科)

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在中国云南省西双版纳自然保护区采集到圆鳞蚁属 *Epitritus* Emery 1新种: 大禹圆鳞蚁 *E. dayui* sp. nov.。至此中国已知该属昆虫4种: 六节圆鳞蚁 *E. hexamerus* Brown, 台湾圆鳞蚁 *E. formosus* Terayama, Lin et Wu, 平岛圆鳞蚁 *E. hirashimai* Ogata 和大禹圆鳞蚁 *E. dayui* sp. nov.。文中编制了中国圆鳞蚁属4个已知种工蚁和雌蚁分种检索表。模式标本保存于西南林学院资源学院昆虫标本室。

大禹圆鳞蚁 *Epitritus dayui*, 新种 (图9~12)

正模: 工蚁, NoA97-2677, 1380 m, 云南省勐腊县南贡山, 季风常绿阔叶林, 1997-IX-16, 徐正会。本新种与平岛圆鳞蚁 *E. hirashimai* Ogata (图6~8) 接近, 但上颚具细长的刺状齿, 基齿长度与咀嚼缘宽度相等; 触角柄节亚基叶形成一直角; 侧面观胸部背面强烈隆起。

关键词: 膜翅目 蚁科 圆鳞蚁属 新种 中国 云南