

# SYSTEMATICS OF CHINESE SPECIES OF THE ANT GENUS *PRISTOMYRMEX* MAYR (HYMENOPTERA: FORMICIDAE)

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**Abstract** This paper examines the systematic relationships of four Chinese species of *Pristomyrmex* Mayr, i. e. *P. brevispinosus* Emery, *P. formosae* Forel, *P. pungens* Mayr, *P. hamatus* sp. nov. A key based on worker caste is provided for the known Chinese species. The new species, *P. hamatus* sp. nov., collected in the tropical rain forest of southern Yunnan Province is close to *P. pungens* Mayr, but inner margin of mandible with a distinct tooth, in dorsal view apices of propodeal spines curved inward and hook-like, in profile view dorsum of alitrunk roundly convex, petiolar node broad and with dorsum relatively straight. The type specimens are deposited in the Insect Collection, Faculty of Resources, Southwest Forestry College, Kunming, yunnan Province, China.

**Key words** hymenoptera, formicidae, pristomyrmex, taxonomy, China

The ant genus *Pristomyrmex* Mayr is distributed in the Old World tropics and subtropics (Bolton, 1995a). According to Bolton (1995b), 38 species have been recorded and the Indo-Australian Region is the distribution center of the genus. Taylor (1965, 1968) revised the Australian species and Bolton (1981) revised the Afrotropical species but no revision of species found elsewhere has been done to date.

Three pristo-species were previously known in China. Forel (1912) described *Pristomyrmex brevispinosus* r. *sulcatus* var. *formosae* from Taiwan Province. However, Bolton (1995b) treated this variety as invalid causing its name to be unavailable. Recent reexamination of this variety by Lin *et al.* (1998) has resulted in its validity being reinstated and it being raised to species rank, i. e. *P. formosae* Forel. Wheeler (1930-1931) reported *P. pungens* Mayr from eastern China. In the 1990's, Chou *et al.* (1991) recorded *P. pungens* Mayr from Taiwan Province. Wu *et al.* (1995) reported *P. pungens* Mayr in northern, eastern and southern China. Tang *et al.* (1995) recorded *P. pungens* Mayr and *P. brevispinosus* Emery in China. In this paper, a new species of the genus, *P. hamatus*

sp. nov. from the tropical rain forests of southern Yunnan Province is described. Up to date, 4 species of *Pristomyrmex* have been recorded in China.

Standard measurements and indices are as defined in Bolton (1981): TL-Total length, HL-Head length, HW-Head width, CI-Cephalic index =  $HW \times 100 / HL$ , SL-Scape length, SI-Scape index =  $SL \times 100 / HW$ , PW-Pronotal width, AL-Alitrunk length, ED-Maximum diameter of eye. All measurements are expressed in millimeters. The type specimens are deposited in the Insect Collection, Faculty of Resources, Southwest Forestry College, Kunming, Yunnan Province, China.

## Genus *Pristomyrmex* Mayr

*Pristomyrmex* Mayr, 1866, Verh. Zool.-Bot. Ges. Wien 16: 903. Type-species: *Pristomyrmex pungens*, by monotypy.

### Key to Chinese species of *Pristomyrmex* based on worker caste

1. Pronotum with a pair of spines or dents. Propodeum with a pair of short spines ..... 2
- Pronotum without spines and dents. Propodeum with a pair of long spines ..... 3