TWO NEW SPECIES OF THE ANT GENUS Polyrhachis SMITH FROM YUNNAN, CHINA*

(Hymenoptera: Formicidae)

XU Zheng-hui

(Department of Forest Protection, Southwest Forestry College, Kunming, Yunnan 650224)

Abstract In this paper, 2 new species of the ant genus Polyrhachis Smith found in Yunnan Province of China, P. cyphonota sp. n. and P. bakana sp. n., were described. P. cyphonota sp. n. belongs to the subgenus Cyrtomyrma Forel. P. bakana sp. n. belongs to the subgenus Myrmhopla Forel. P. bakana sp. n. was found in the tropical rain forest of Xishuangbanna Nature Reserve.

Key words Hymenoptera, Formicidae, Polyrhachis, New species, Yunnan

Polyrhachis Smith (1858) is a large genus in Formicidae. According to Bolton (1995a, 1995b), 477 species were described in the world, and Indo—Australian region is the center of the genus' distribution. Hung (1967) had a revisionary study of the subgenera of Po-lyrhachis, but most subgenera are much large and not convenient for identification of species. In contrast, species—group dividing is a useful way to recognize the numerous members in this large genus, just like the works of Bolton (1975) and Kohout (1987, 1989). However, much revisionary work in species—groups remains to be done.

Chinese species of *Polyrhachis* were reported by Smith (1858), Forel (1879), Viehmeyer (1912), Wheeler (1930–1931), and Chou *et al.* (1991). Recently, Wang *et al.* (1991) and Wu *et al.* (1995) had comprehensive studies of the genus and most Chinese species were treated. Tang *et al.* (1995) also reported part species of *Polyrhachis*. During the course investigating ant fauna of Southwestern China, 2 new species were discovered in Yunnan Province. Up to date, 31 species and 1 subspecies of *Polyrhachis* are known in China.

Measurements and indices are as defined in Bolton (1973, 1975). Total length—TL, Head length—HL, Head width—HW, Cephalic index—CI=HW×100/HL, Scape length—SL, Scape index—SI=SL×100/HW, Pronotal width—PW, Alitrunk length—AL, Maximum diameter of eye—ED. All measurements are expressed in millimeters. The type

^{*} This study is supported by the National Natural Science Fundation (Project No. 39500118) and the Applied and Basic Research Fundation of Yunnan Province (Project No. 95C067Q)

本文 1997-04-02 收到, 1997-09-16 修回