

A review of the *Polyrhachis xiphias* species-group of the subgenus *Campomyrma* Wheeler (Hymenoptera: Formicidae: Formicinae)

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ABSTRACT. The *Polyrhachis xiphias* species-group of the subgenus *Campomyrma* Wheeler is reviewed. Descriptions of the previously-undescribed worker of *P. xiphias* and queen of *P. shixingensis* are given. A key to workers of the group is provided. Workers of all species and queens of *P. shixingensis* and *P. xiphias* are illustrated.

Keywords: Formicidae, *Polyrhachis*, *Campomyrma*, *xiphias*-group, China, Vietnam, Borneo, New Guinea, taxonomy

INTRODUCTION

The *Polyrhachis xiphias* species-group was introduced by Kohout (2007) to house three widely-distributed species of the subgenus *Campomyrma* Wheeler: *P. xiphias* Fr. Smith from New Guinea, *P. shixingensis* Wu & Wang from China and *P. hashimotoi* Kohout from Borneo. The newly-erected group was characterised by a columnar petiole with a pair of horizontal, posteriorly-directed spines, rather similar to those in species of the subgenus *P. (Hagiomyrma)* Wheeler. All three species are very similar and share a rounded pronotal dorsum and a pair of horizontal, posteriorly-directed propodeal spines. They are apparently rare, with only a handful of specimens known from all collections examined. However, in the course of my studies I have discovered the previously-unknown workers of *P. xiphias* and queens of *P. shixingensis* which are described below. An identification key to the workers of all three species of the group is also provided.

METHODS

The present review is based on all specimens known to the author, except the type series of *P. shixingensis*, supposedly lodged in the collection of the Research Institute of Forest

Protection of the Chinese Academy of Forestry in Beijing. In lieu of the types, specimens collected by Dr J. R. Fellowes in Guangdong Province in China, and by Dr A. G. Radchenko on Dongkho Island in Vietnam, were examined. Voucher specimens based on this study were selected and lodged in QMBA, with two specimens each donated to ANIC, BMNH and MCZC, courtesy of Dr J. R. Fellowes (KFBG).

Photographs of the specimens were taken with a digital camera attached to a stereomicroscope and processed using Auto-Montage (Syncroscopy, a division of Synoptics Ltd, USA) and Adobe Photoshop CS2 (Adobe Systems Inc., USA). The photographs were produced by Dr Steve O. Shattuck (ANIC), except that of *P. hashimotoi*, photographed by Hans Peter Katzmann (UUUG), courtesy of Dr Martin Pfeiffer (presently at NUM).

The standard measurements and indices largely follow those of Kohout (2007): TL = Total length (the necessarily composite measurement of the outstretched length of the entire ant measured in profile); HL = Head length (the maximum measurable length of the head in perfect full-face view, measured from the anterior-most point of the clypeal border or teeth, to the posterior-most point of the occipital margin); HW = Head width (width of the head in perfect