## AMERICAN MUSEUM NOVITATES

Number 3709, 10 pp.

April 19, 2011

## Taxonomic Notes on the Vespinae of Yunnan (Hymenoptera: Vespidae)

## JAMES M. CARPENTER,<sup>1</sup> LIBOR DVOŘÁK,<sup>2</sup> JUN-ICHI KOJIMA,<sup>3</sup> LIEN T.P. NGUYEN,<sup>4</sup> ADRIEN PERRARD,<sup>5</sup> AND KURT M. PICKETT<sup>6†</sup>

## ABSTRACT

In recent years, five new species of Vespinae have been described from Yunnan Province, China. A thorough assessment of these taxa, including study of color differences and compilation of measurements of specimens from six entomological collections, shows that the new taxa are merely variants of existing, nominal species. Thus, all five are synonymized here, as follows: *Vespa hekouensis* Dong and Wang, and *Vespa maguanensis* Dong = *Vespa analis* Fabricius; *Vespula yulongensis* Dong and Wang = *Vespula flaviceps* (Smith); *Vespula nujiangensis* Dong and Wang = *Vespula orbata* (du Buysson); and *Vespula gongshanensis* Dong = *Vespula rufa* (Linnaeus), all NEW SYNONYMY. The synonymies bring the current number of vespine species recognized worldwide to 67.

Key words: Vespidae, Vespinae, Yunnan.

Copyright © American Museum of Natural History 2011

<sup>&</sup>lt;sup>1</sup>Division of Invertebrate Zoology, American Museum of Natural History.

<sup>&</sup>lt;sup>2</sup> 2Municipal Museum Mariánské Lázně, Goethovo Náměstí 11, CZ-353 01 Mariánské Lázně, Czech Republic.

<sup>&</sup>lt;sup>3</sup>Natural History Laboratory, Faculty of Science, Ibaraki University, Mito 310-8512, Japan.

<sup>&</sup>lt;sup>4</sup>Department of Insect Ecology, Institute of Ecology and Biological Resources, 18 Hoang Quoc Viet Street, Cau Giay, Hanoi, Vietnam.

<sup>&</sup>lt;sup>5</sup>Muséum National d'Histoire Naturelle, Entomologie, CP 50, 75005 Paris, France.

<sup>&</sup>lt;sup>6</sup>Department of Biology, University of Vermont, 120A Marsh Life Science Building, 109 Carrigan Drive, Burlington, VT 05405.

<sup>&</sup>lt;sup>†</sup>Deceased.