

TAXONOMIC NOTES ON THE  
*MYRMECOCYSTUS MELLIGER* COMPLEX

(Hymenoptera: Formicidae)

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**ABSTRACT:** The *Myrmecocystus melliger* complex is defined and the taxonomic status of the specific and varietal names included is investigated. A key to the component species, for workers and females, is given and these castes are illustrated. Species included are: *M. mendax*, *M. melliger* (synonym: *M. melliger mendax comatus*), *M. semirufus* and *M. placodops* (synonym: *M. melliger orbiceps*); *M. melliger testacea* is removed from the synonymy of *M. semirufus* and transferred to the *mexicanus* group as a senior synonym of *M. mojave* (new synonym).

When Wheeler (1908) revised the genus *Myrmecocystus*, he recognized but two protean species, *M. melliger* Forel and *M. mexicanus* Wesmael. Each of these had attributed to it a number of subspecies and varieties. Additions by Wheeler and others in subsequent years added three specific names and a welter of additional subspecies and varieties, most of these assigned to *M. melliger*.

Probably the number of names proposed would not be so high had not Wheeler propounded a peculiar theory with respect to these ants. He postulated that certain forms were behaviorally incapable of forming repletes. The result was that whenever he found a colony of a presumably nonreplete forming species which contained repletes, he was faced with a dilemma; whether to abandon his original idea or to describe the occupants of the colony as a new form. Unfortunately, he chose the latter course of action, resulting in a number of superfluous names founded on extremely dubious characters.

Creighton (1950) reevaluated many of these names and rightly placed them in synonymy. The present paper is a further evaluation of one complex in the genus, the *M. melliger* complex, and is published at this time in order that the changes proposed here may be available to others conducting investigations in this genus.

As constituted by Creighton (1950), the *M. melliger* complex includes those species with the following combination of characteristics in the worker caste: mandibles with seven teeth; eyes small, their greatest diameter equal to the length of the first funicular segment; ocelli always present, prominent; petiolar node thick from front to back, the crest blunt; erect hairs coarse and numerous, abundant and conspicuous on cheeks, those on gaster arising from punctures at the top of small conical papillae; pubescence dense, especially on gaster, largely obscuring surface beneath; integument dull to moderately shining; larger species, 4.5-11.0 mm.

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