



The ant genus *Pseudaphomomyrmex* Wheeler, 1920 a junior synonym of *Tapinoma* Foerster, 1850

Ashmead (1905) described a solitary alate queen ant, collected in the Philippines, as *Aphomyrmex emeryi*. The generic combination, obviously a misspelling of *Aphomomyrmex* Emery, 1899 (see Bolton, 1995) placed the name in the subfamily Formicinae. Wheeler (1920) disagreed with the generic combination and removed *emeryi* to its own monotypic genus, *Pseudaphomomyrmex*. He did not characterise the genus at that time but later (Wheeler, 1922: 695) included it in a key to Formicinae, thereby indicating which characters he considered diagnostic and apparently confirming its position in that subfamily. A short time later Emery (1925: 44) dismissed *Pseudaphomomyrmex* as a junior synonym of *Aphomyrmex* but the name was later revived from synonymy, probably accidentally, by Chapman & Capco (1951: 214). From its description to the present *Pseudaphomomyrmex* has been placed in a number of different tribes, summarised in Bolton (2003), but always retained in subfamily Formicinae.

The situation rested there until very recently. The name *Pseudaphomomyrmex* was not considered by Shattuck (1992) in his revisionary study of the genera of subfamily Dolichoderinae as no-one had ever suggested that it may belong in that subfamily. It was omitted from Bolton's (1994) worker-based keys to ant genera as it was known only from a queen. *Pseudaphomomyrmex* was therefore in a kind of taxonomic limbo, ignored and mostly forgotten.

While working on some aspects of Formicinae phylogeny, LaPolla & Longino (2006) had occasion to examine the holotype of *Pseudaphomomyrmex emeryi*, on the grounds that it was possibly a member of the group in which they were interested. This was apparently the first critical examination of the specimen since its original description. They found that, contrary to long-held assumptions, the species was a dolichoderine ant, not a formicine. They transferred the genus into subfamily Dolichoderinae but left the genus as valid. The present authors, having re-examined the holotype, relegate *Pseudaphomomyrmex* to the synonymy of *Tapinoma* and refer the species *emeryi* to that genus, for the reasons discussed below.

Preliminary examination of the specimen supported the conclusion of LaPolla and Longino (2006: 305) that this ant is correctly placed in subfamily Dolichoderinae. The characters they list are supported by the morphological and phylogenetic works of Shattuck (1992, 1995) and the synopsis by Bolton (2003).

Within the Dolichoderinae two genera, *Tapinoma* and *Technomyrmex*, are isolated in their female castes by the synapomorphic extreme reduction of the petiole and its accommodation in a longitudinal groove or impression in the ventral surface of the first gastral tergite, which overhangs and conceals the petiole in dorsal view when the mesosoma and gaster are aligned. The petiole is so reduced in these two genera that in profile there is no trace of a node or scale; at most there is a very short raised surface immediately behind the peduncle. The function of this raised surface is to provide an insertion-site for the exterior levator muscle of the petiole. *Pseudaphomomyrmex* exhibits these structures.

Technomyrmex and *Tapinoma* are separated in the female castes by the contrasting morphologies of their gastral apices. In *Technomyrmex* the sclerites of the gastral apex are unspecialised, except that the pygidium is small. Gastral tergite 5 is therefore in line with tergites 1–4 and as a result all five tergites are visible in dorsal view. In contrast the pygidium in *Tapinoma* is reflexed, the fifth tergite being folded back and down, below the fourth tergite, and is clearly visible in ventral view. Also in that view the fourth tergite frequently forms a distinct projecting rim above the reflexed fifth. In consequence only gastral tergites 1–4 are visible in dorsal view. *Pseudaphomomyrmex* exhibits the latter morphology, which is uniquely characteristic of *Tapinoma*, and thus the former name is relegated to the synonymy of the latter.

As a result of the above analysis the taxonomic synopses of genus *Tapinoma*, and of the two names in the species-group that are affected by the genus-group modifications, are amended as follows.

TAPINOMA Foerster

Tapinoma Foerster, 1850: 43. Type-species: *Tapinoma collina* Foerster, 1850: 43 [junior synonym of *Formica erratica* Latreille, 1798: 44], by monotypy.

Micromyrma Dufour, 1857: 60. Type-species: *Micromyrma pygmaea* Dufour, 1857: 61, by monotypy. [Synonymy by Mayr, 1863: 455, confirmed by Shattuck, 1992: 146.]