



New synonyms in neotropical Myrmicine ants (Hymenoptera: Formicidae)

BARRY BOLTON¹, JEFFREY SOSA-CALVO^{2,3}, FERNANDO FERNANDEZ⁴, & JOHN E. LATTKE⁵

¹*c/o. Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.*

E-mail: boltons@breatheconnect.com

²*Maryland Center for Systematic Entomology, Department of Entomology, University of Maryland, 4112 Plant Sciences Building, College Park, Maryland 20742, U.S.A.*

³*Department of Entomology, National Museum of Natural History, Smithsonian Institution, POB 37012, NHB, CE518, MRC 188; Washington, D.C. 20013-7012, U.S.A. E-mail: sossajef@si.edu*

⁴*Instituto de Ciencias Naturales, Universidad Nacional de Colombia. Bogotá D.C, Colombia. E-mail: ffernandezca@unal.edu.co*

⁵*Museo del Instituto de Zoología Agrícola, Universidad Central de Venezuela, Apartado 4579, Maracay 2101-A, Venezuela.*

E-mail: piquihuye@fastmail.fm

The year 2007 saw the publication of what is one of the most inadequate papers that has ever been produced in ant taxonomy. The paper, by Makhan (2007), claims to describe six new species of the ant genus *Pyramica* Roger, from Suriname.

The paper begins with a 7-line introduction in which the author claims to describe “the first species of *Pyramica* Roger, 1862 (Formicidae: Hymenoptera) from Suriname.” The first immediate problem is that only half of his species are *Pyramica* (two are *Strumigenys* and one is *Octostruma*, which is not even a member of the same tribe), and the second is that previous authors had already listed over a dozen *Pyramica* species, and even more of *Strumigenys*, from Suriname and its adjacent territories of French Guiana, Guyana, and northern Brazil (Kempf, 1961, 1972; Brandão, 1991; Bolton, 2000; Fernández & Sendoya, 2004; LaPolla *et al.* 2007, Sosa-Calvo, 2007). None of these were considered by the author, who seems blissfully unaware, or perhaps does not care, that any additional taxonomy had taken place in these groups since 1862.

Makhan then launches into the descriptions of the species. These are minimal and superficial and contain no comparative notes. The amazing thing is that he has somehow managed to omit most important characters of diagnostic value at species rank, which in itself is a genuine achievement. Each description is accompanied by two fuzzy, out of focus photographs that serve as illustrations of the inadequate descriptions.

Following the descriptions is a minimalist key that includes only the six “new” species, and a single reference completes the study. The reference is Roger (1862), which is the paper that established the genus *Pyramica* and described its type-species, *P. gundlachi*. This last species is not referred to at all by Makhan. It is not included in his key, none of his “new species” are compared to it and none of its characters are mentioned. No references to any taxonomic works after Roger (1862) are included, even though Neotropical ants in these genera have been fairly well documented (Brown 1948, 1949, 1953, 1954, 1960, 1961, 1962; Brown and Kempf 1960; Bolton 2000). All the senior synonyms of Makhan’s names, listed below, were described in the late 1800s. This is hardly a surprise, as the most common species in any group tend to be the ones collected first and described first. All that he has done is sample some of Suriname’s common species of Dacetini, and one common species of Basicerotini, and describe them all as new, without checking if any of them already had identities. His motives for writing this paper cannot be imagined and the total lack of investigation of previous endeavour defies understanding. The production of irresponsible species descriptions by Makhan has previously been recognized by workers in other arthropod groups — including beetles and spiders — and in gastropods (see Jäch 2006).

Type-material and synonymy

Makhan states that the holotypes of all six species are deposited in “University of Suriname, Department of Entomology, Paramaribo, Suriname”, referred to below by the abbreviation USPS. At present the specimens are not there (personal communication from the curator K.D.B. Dijkstra to T. Schultz (Smithsonian Institution)), nor is there any con-

viction on our part that they ever will be. The real identities of all of the Makhan species are apparent because all are widespread, common, and very well known, and can in fact be recognised even from the poor figures and minimalist descriptions that he provides.

The species

1. *Pyramica amrishi* Makhan, 2007: 1, figs 1, 2. Holotype and paratype workers, SURINAME: Kasikasima, 27.iii.1996 (*D. Makhan*) [not in USPS]. New junior synonym of *Octostruma balzani* (Emery, 1894).

Comment. The author has managed to place this species in the wrong genus and tribe. The photographs are infuriatingly fuzzy but the head shape and distribution of the setae that are visible makes it almost certain that the “new species” *amrishi* is really one of the commonest and most widely distributed of Neotropical basicerotine ants, *Octostruma balzani*. *Octostruma balzani* has been previously collected from Dirkshoop, Sidoredjo, and Tambahredjo; eastern Suriname (Lely and Nassau Plateaus); and Nickerie District.

References: Brown & Kempf (1960); Kempf (1961, 1972); LaPolla *et al.* (2007); Palacio (1997); Sosa-Calvo (2007); Sosa-Calvo (unpublished).

2. *Pyramica aschnae* Makhan, 2007: 2, figs 3, 4. Holotype worker, SURINAME: Carolina Creek, 6.iv.1996 (*D. Makhan*) [not in USPS]. New junior synonym of *Pyramica denticulata* (Mayr, 1887).

3. *Pyramica aschnakiranae* Makhan, 2007: 3, figs 5, 6. Holotype and paratype workers, SURINAME: Kasikasima, 27.iii.1996 (*D. Makhan*) [not in USPS]. New junior synonym of *Pyramica denticulata* (Mayr, 1887).

Comment. The characteristic morphology of this species can be discerned even in the poor quality photographs provided. It is *Pyramica denticulata*, one of the commonest and most widespread of Neotropical long-mandibulate *Pyramica* species. Bolton (2000) points out the variation in teeth count present in this species, variation obviously omitted by Makhan (2007), who described them as two species due to number of teeth in the inner margin of the mandibles. This species is already known from Suriname (Dirkshoop, Sidoredjo, Tambahredjo, Maripaheuvél near Dam on Sara Creek, Lely and Nassau Plateaus [eastern Suriname], and Nickerie District) and all other countries that surround it. Recently, this species was reported for Central America.

References: Brown (1960, 1962); Kempf (1961); LaPolla *et al.* (2007); Lattke & Goitía (1997); Bolton (2000); Fernández & Sendoya (2004); Sosa-Calvo *et al.* (2006); Sosa-Calvo (2007); Sosa-Calvo (unpublished).

4. *Pyramica kiranae* Makhan, 2007: 4, figs 7, 8. Holotype and paratype workers, SURINAME: Kasikasima, 27.iii.1996 (*D. Makhan*) [not in USPS]. New junior synonym of *Pyramica subdentata* (Mayr, 1887).

Comment. There is a slight possibility that *kiranae* may be a junior synonym of *trieces* (Brown, 1960), rather than *subdentata*. The last two are very closely related and the characters that differentiate them (alitrunk pilosity and sculpture of the first gastral sternite) are not discernible in the photographs and are not mentioned in the descriptions. However, *trieces* is known only from Central America, whereas *subdentata*, apart from being a more common species, is also widespread in northern South America, with records from Colombia, Venezuela, Trinidad, Suriname, French Guiana, Guyana, Brazil and Peru.

References: Brown (1960, 1962); Lattke & Goitía (1997); Bolton (2000); Fernández & Sendoya (2004); LaPolla *et al.* (2007); Sosa-Calvo (2007).

5. *Pyramica rishwani* Makhan, 2007: 5, figs 9, 10. Holotype and paratype workers, SURINAME: Kasikasima, 27.iii.1996 (*D. Makhan*) [not in USPS]. New junior synonym of *Strumigenys elongata* Roger, 1863.

Comment. Makhan records the holotype as a worker and his figs 9 and 10 are both labelled as being of the worker holotype. But his fig. 9 is a queen (gyne) and his fig. 10 is the head of a different specimen, apparently a genuine worker. It is obvious that two different specimens are involved as the orientations of their mandibles and antennae are different in the two photographs. Therefore the synopsis should read “syntype workers and queen.” Regardless of that, both specimens are not *Pyramica* but are *Strumigenys elongata*, one of the commonest and most widely distributed of Neotropical *Strumigenys*. It is already known from Suriname (near Maripaheuvél and Lely and Nassau Plateaus).

References: Brown (1954, 1962); Kempf (1961); Lattke & Goitía (1997); Bolton (2000); LaPolla *et al.* (2007); Sosa-Calvo (2007).

6. *Pyramica wani* Makhan, 2007: 6, figs 11, 12. Holotype worker, SURINAME: Nieuw Amsterdam, 30.iii.1996 (*D. Makhan*) [not in USPS]. New junior synonym of *Strumigenys louisianae* Roger, 1863.

Comment. From the photographs that are figs. 11 and 12 it is apparent that *Pyramica wani* is yet another name to add to the already long synonymy of *Strumigenys louisianae*. The range of this species is vast, extending from the southern states of the U.S.A. to northern Argentina; it is already well known in the fauna of Suriname (Dirkshoop).

References: Smith (1931); Brown (1953, 1961, 1962); Kempf (1961); Deyrup (1997); Lattke & Goitia (1997); Bolton (2000).

Acknowledgments

We would like to thank John LaPolla (Towson University), Phil Ward (University of California at Davis) and Ted Schultz (Smithsonian Institution) for comments on early versions of this manuscript. We also thank K.D.B. Dijkstra (USPS) for information regarding the type specimens.

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