segment bent near base, remaining segments straight; occipital carina very thin, not developed as a distinct flange; fused notaulae present anteromedially, parapsidal lines distinct; wing venation similar to queen but more feeble; ventral margin of petiole a more delicate version of condition in worker and queen; abundant flexuous suberect setae on dorsal head, mesosoma, and metasoma; color dark red brown to black with wings, legs (including coxae), entire antenna (including apex), and mandible contrasting ivory, nearly white.

Biology. *Megalomyrmex mondaboroides* occurs in lowland wet forest habitats in Panama and Costa Rica. Colonies have been collected in the nests of small attines, primarily *Cyphomyrmex costatus* Mann and *Apterostigma goniodes* Lattke. In Costa Rica a worker was collected in a Winkler sample of sifted leaf litter.

Etymology. The name of this species refers to its similarity to *M. mondabora*.

Comments. Megalomyrmex mondaboroides and M. mondabora are very similar species, and they were treated as a single variable species in Adams and Longino (2007). There is now evidence that the two forms are sympatric in Costa Rica, and molecular evidence suggests that the two are probably sister taxa (Adams, pers. comm.). There are also hints that both may further resolve into multiple cryptic species. Collections from Panama include two nests found with Cyphomyrmex costatus and two nests found with Apterostigma gonioides. The workers with C. costatus are relatively small, with HL < 0.70 mm, while the workers from A. gonioides are larger, with HL > 0.78 mm. An isolated worker from Costa Rica is also larger, with HL about 0.78. In the case of M. mondabora, there are contrasting forms of mandibular dentition (described in the key to species). Numerous collections of a form with a large basal denticle on the mandible have been made from nests of C. cornutus, and this form was the subject of the behavioral study of Adams and Longino (2007). In contrast, the holotype of M. mondabora has the small basal denticle and rounded junction of M. mondaboroides. The holotype also differs in host association; it was accompanied by fieldnotes indicating it was associated with an Apterostigma Mayr nest. The types were collected by the renowned myrmecologist W. L. Brown, Jr., and it is inconceivable that he could have misidentified the genus (i.e., misidentifying C. cornutus). Thus in both M. mondaboroides and M. mondabora there is the potential for further division, perhaps paralleling specialization on various attine hosts. Further host-associated collections of these elusive ants are needed.

In South America, scattered collections of *M. mondabora*-like ants are known from Ecuador, Peru, and Amazonian Brazil. Many were collected with attine hosts. Morphologically they blur the distinctions that separate the sympatric *M. mondaboroides* and *M. mondabora* in Costa Rica. One can anticipate a considerably more complex story when the group is better collected throughout the range.

Additional material examined. COSTA RICA: <u>Heredia</u>: La Selva Biological Station, 10°24'59"N, 084°01'12"W, 50 m, mature wet forest, 14 Jun 2004 (M Molina, D Alvarez, G Hurtado); PANAMA: Pipeline Road km 2.0, 09°09'36"N, 079°44'42"W (C. Currie); Barro Colorado Island, Fausto to Wheeler trail, 09°09'53"N, 079°50'12"W, 23 Dec 2004 (R. Adams); Gamboa, Pipeline Rd, 2.5 km past Rio Frijoles, 72m, 6–8 Jun 2002 (C. J. Marshall).

South American material in the *mondabora* complex: BRAZIL: <u>Rondonia</u>: Vilhena, 12°43′S, 060°07′W, Nov 1973 (M. Alvarenga); <u>Sao Paulo</u>: Picinguaba, P. E. Serra do Mar, 23°20′10″S, 044°50′15″W, 100 m, 30 Mar–4 Apr 2001 (C. R. F. Brandão); ECUADOR: <u>Napo</u>: Tiputini, Matapalo Trail, 00°38′18″S, 076°08′58″W, 14 Jun 2003 (C. Currie); <u>Pichincha</u>: Unión del Toachi Station, 4 km SE of station, 00°19′16″S, 078°56′22″W, 875 m, 15 Mar 2006 (R. Adams); PERU: <u>Madre de Dios</u>: Manú, Huacaria, 12°54′10″S, 071°25′25″W, 600 m, 28 May 2004 (R. Adams).

Megalomyrmex nocarina Longino, new species

(Figs 5A, 5C, 10A, 10B)

Type material. *Holotype worker*. COSTA RICA, Heredia: Estación Biológica La Selva, 10°26'N 83°59'W, 40–125 m, 16 Sep 2005 (Proyecto TEAM AMI–1–W–044–03) [MCZ, unique specimen identifier INB0003678142]. *Paratypes*: Same data as holotype, except 4 Sep 2007 (Proyecto TEAM AMI–1–W–091–04), 1 worker [CAS, INB0003695485]; 12 Jun 2006 (Proyecto TEAM AMI–1–W–080–04), 1 worker [INBC, INB0003694200]; 7 km SW Pto. Viejo, 10°24'14"N, 084°02'22"W, 160 m, 20 Jan 2006 (Proyecto TEAM AMI–2–W–059–03), 1 worker [LACM, INB0003680680]; same except 24 Oct 2006 (Proyecto TEAM AMI–2–W–105–06), 1 worker [USNM, INB0003697094]; same except 23 Apr 2007 (Proyecto TEAM AMI–2–W–131–10), 2 workers [UCD, CASENT0613301; INBC, INB0003699639]; 16 km SSW Pto. Viejo, 10°19'03"N, 084°02'56"W, 500 m, 16 Oct