encountered as workers in Winkler samples of sifted leaf litter. Colonies have twice been collected from dead wood on the forest floor (Brandão, 2003).

Comments. Material from Central America and Venezuela is very similar in color and mandibular dentition. Workers are solid black, and the basal teeth of the mandible vary in size, the second from the base being much larger than the flanking teeth. As a result the mandible appears falcate rather than triangular. A collection from Colombia is distinctive, with the color lighter red brown and the basal teeth of the mandible of more uniform size. Other size and shape characters, including the highly distinctive petiole, are the same as other M. incisus. M. incisus has a range disjunction. It is moderately abundant in Winkler samples from Guatemala and southern Mexico, occurs in Panama and Venezuela, yet has never been collected in Costa Rica, in spite of extensive survey work there.

Material examined. BRAZIL: Amazonas: Manaus, $03^{\circ} 07$ 'S, $060^{\circ} 02^{\prime} \mathrm{W}, 3$ Nov 1993 (A. B. Casimiro); COLOMBIA: Leticia: El Zafie, $04^{\circ} 13$ 'S, $069^{\circ} 56^{\prime} \mathrm{W}, 150 \mathrm{~m}, 2-4$ Oct 2007 (L. E. Franco \& S. Florica); GUATEMALA: Izabal: 5 km NW Morales, $15^{\circ} 30^{\prime} 38^{\prime \prime N}$, $088^{\circ} 51^{\prime} 39^{\prime \prime} \mathrm{W}, 195 \mathrm{~m}, 2^{\circ}$ lowland tropical rainforest, 17 May 2009 (LLAMA); 16 km ESE Morales, $15^{\circ} 24^{\prime} 40^{\prime \prime N}$, $088^{\circ} 42^{\prime} 43^{\prime \prime} \mathrm{W}, 440 \mathrm{~m}, 19$ May 2009 (LLAMA); Petén: 13 km NW Machaquilá, $16^{\circ} 26^{\prime} 44^{\prime \prime} \mathrm{N}, 089^{\circ} 33^{\prime} 00^{\prime \prime} \mathrm{W}, 400 \mathrm{~m}$, tropical moist forest, 27 May 2009 (LLAMA); MEXICO: Chiapas: 8.8 km SE Salto de Agua, $17^{\circ} 30^{\prime} 48^{\prime \prime N}$, $092^{\circ} 17^{\prime} 43^{\prime \prime} \mathrm{W}, 50 \mathrm{~m}$, mixed secondary rainforest, 14 Jul 2007 (R. S. Anderson); Playón de la Gloria, $16^{\circ} 08^{\prime} 52^{\prime \prime} \mathrm{N}, 090^{\circ} 53^{\prime} 48^{\prime \prime} \mathrm{W}, 170 \mathrm{~m}, 24$ Jun 2008 (LLAMA); Lago Metzabok, $17^{\circ} 07^{\prime} 32^{\prime \prime} \mathrm{N}, 091^{\circ} 37^{\prime} 51^{\prime \prime} \mathrm{W}, 570 \mathrm{~m}$, lowland wet forest, 6 Jun 2008 (LLAMA); Nahá, $16^{\circ} 58^{\prime} 49^{\prime \prime N}, 091^{\circ} 35^{\prime} 10^{\prime \prime} \mathrm{W}$, $860 \mathrm{~m}, 2^{\circ}$ mesophil forest, 12 Jun 2008 (M. Branstetter); PANAMA: Canal Zone: Barro Colorado Island, $09^{\circ} 09^{\prime} \mathrm{N}$, $079^{\circ} 51^{\prime} \mathrm{W}, 100 \mathrm{~m}, 2$ Jul 1979 (W. L. Brown); PERU: Pasco: nr. Pozuzo, 1000 m , steep primary forest above farms, 4-6 Jun 1981 (C. Kugler \& R. R. Lambert); VENEZUELA: Aragua: 1.6 km SSW Cumboto, $10^{\circ} 23^{\prime} 19^{\prime \prime N}$, $067^{\circ} 47^{\prime} 52^{\prime \prime} \mathrm{W}, 150 \mathrm{~m}$, riparian dry forest, 15 Aug 2008 (J. Longino).

## Megalomyrmex miri Brandão

Megalomyrmex miri Brandão, 1990: 452, figs 117, 118. Holotype worker: Zent, Limón Prov., Costa Rica, Mar. 1924 (Mann) [USNM] (not examined).

Measurements. Worker: HW 0.48, HL 0.50-0.55, SL 0.48-0.50, ML 0.75-0.78 ( $\mathrm{n}=2$, from Brandão, 1990).
Geographic range. Costa Rica.
Comments. This species is known only from the type specimens and has no biological data. It is extremely similar to M. wettereri in color, size, shape, measurements, and pilosity. It differs in having a complete foraminal carina and some transverse rugosities on the anteroventral petiolar process.

## Megalomyrmex modestus Emery

Megalomyrmex modestus Emery, 1896: 94. Lectotype worker (designated by Brandão 1990: 425): Suerre [near Jimenez, Limón Prov.], Costa Rica [MCSN] (examined). Brandão, 1990: 426: description of queen, male.

Measurements. Worker: HW 0.81-0.93, HL 1.00-1.12, SL 1.02-1.12, ML 1.29-1.45 (n=13, from Brandão, 1990). Geographic range. Costa Rica, Panama, Colombia, Venezuela.
Biology. Forel (1899) reported that the type specimens were collected by A. Alfaro from a rotten log. Kugler collected specimens in Colombia, from a "large nest in rotten log, soil - rocks, under forest" (reported in Brandão 1990).

In Costa Rica, M. modestus is found in mature wet forest of the Atlantic slope. Although it occurs at sea level, it is most abundant at middle elevations, 500-800 m. Nests are subterranean and very large. From these nests, inconspicuous covered galleries extend large distances up trees and under liana stems, and workers may be found under epiphyte mats in the canopy. Workers tend Coccoidea under the shelters. Workers are occasionally collected at baits on the forest floor, but in general they are not often seen as exposed foragers.

At Refugio Eladio, on the Río Peñas Blancas, I found a nest on the bank of a small stream. An area of excavated soil about 2 m across covered the ground. There were hundreds of small entrances, and excavations in the

