

surface soil turned up only scattered workers, and no brood. As I dug deeper into the center of the nest (more than 20cm deep) workers became more dense and I began finding adult males and some brood. At a depth of about arm's length workers were very dense, brood more abundant, and two dealate queens were turned up. The soil was very friable, and I could not discern any gallery or chamber structure. Given that I was digging in only a small part of the colony, and turned up two queens, the colony must have had many queens. Around the periphery of the colony there were abundant Coccoidea (Pseudococcidae?) in the soil.

Additional material examined. COSTA RICA: Alajuela: Casa Eladio, Rio Penas Blancas, 10°19'N, 084°43'W, 800 m, 27 Apr 1988 (J. Longino); El Aleman, Rio Penas Blancas, 10°18'N, 084°45'W, 940 m, 18 May 1991 (J. Longino); 10 km E Monteverde, 10°18'32"N, 084°42'59"W, 820 m, isolated clearing in mature wet forest area, open lawn area at edge of building, 3 Mar 2010 (J. Longino); Cartago: 5 km E Turrialba, 09°54'N, 083°38'W, 945 m; Heredia: La Selva Biological Station, 10°24'59"N, 084°01'12"W, 50 m, 26 Jan 2004 (M Molina, H Garcia); 7 km SW Pto. Viejo, 10°24'14"N, 084°02'22"W, 160 m, 3 Mar 2005 (M Molina/ G Hurtado); 16 km SSW Pto. Viejo, 10°19'03"N, 084°02'56"W, 500 m, 17 Oct 2005 (Marcos M/ Deimer A/ Gilberth H/ Felix C/ Joel A); Cantarrana, 11 km ESE La Virgen, 10°20'43"N, 084°03'28"W, 300 m, 20 Mar 2006 (Marcos M, Gilberth H, Felix C); Casa Plastico, 17 km S Pto. Viejo, 10°18'N, 084°02'W, 550 m, 26 Jan 1989 (J. Longino); 22 km N Volcan Barba, 10°20'N, 084°04'W, 500 m, 7 Mar 1985 (J. Longino); Rara Avis, 17 km S Pto. Viejo, 10°18'N, 084°03'W, 700 m, 11 Sep 1985 (J. Longino); 17 km N Vol. Barba, 10°17'N, 084°05'W, 880 m, 14 Jul 1986 (J. Longino); 11 km ESE La Virgen, 10°21'00"N, 084°03'00"W, 300 m, wet forest, 15 Feb 2004 (ALAS); 11 km SE La Virgen, 10°20'N, 084°04'W, 500 m, 14 Feb 2003 (ALAS); Limón: Hitoy Cerere Biol. Reserve, 09°40'N, 083°02'W, 200 m, 29 Aug 1985 (J. Longino); Rio Toro Amarillo, vic. Guapiles, 10°13'N, 083°48'W.

***Megalomyrmex mondabora* Brandão** (Figs 6A, 8A–H)

Megalomyrmex mondabora Brandão, 1990: 442, figs 95, 96. Holotype worker: Costa Rica, Cartago, Turrialba, 18–22 Jan 1973 (W. L. Brown Jr.) [MCZC] (examined).

Measurements (holotype): HW 0.742, HL 0.875, SL 1.078, EL 0.229, ML 1.34, SI 123, CI 85.

Measurements (n=10): HW 0.742–0.878, HL 0.874–0.963, SL 1.078–1.210, EL 0.299–0.302, ML 1.325–1.497, CI 85–92, SI 121–128.

Geographic range. Costa Rica.

Description. *Queen* (previously undescribed). *Measurements* (n=3): HW 0.939–0.972, HL 0.992–1.012, SL 1.146–1.172, EL 0.327–0.333, ML 1.602–1.645, CI 95–96, SI 114–118.

Palp formula 3,2; general shape, sculpture, and pilosity characters, including mandibular dentition and sculpture, similar to worker; parapsidal lines present, extending from posterior border of mesoscutum to midlength; wing venation as in Fig. 8H.

Male (previously undescribed). *Measurements* (n=2): HW 0.813–0.923, HL 0.750–0.836, SL 0.344–0.401, EL 0.364–0.411, ML 1.378–1.553, CI 45, SI 46–48.

Palp formula 4,3; mandible with large apical tooth, more than twice length of subapical tooth, subapical tooth followed by 5 small basal teeth of somewhat irregular size and spacing; antenna with fourth segment bent, with a sharp kink at 3/4ths length, 5th and 6th segments weakly bent, remaining segments straight; occipital carina well-developed as a distinct flange, but not visible in full-face view; fused notaulae present anteromedially, parapsidal lines distinct; wing venation similar to queen; 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, appendages lighter amber, antennal segments 2, 3, and base of 4 nearly white; wings pale amber, nearly white.

Biology. In Costa Rica this species occurs in wet forest habitats, typically in mature rainforest. Collections are from sea level to 800 m elevation on the Atlantic slope of the Cordillera Volcanica Central, Cordillera de Talamanca, and Cordillera de Guanacaste. It is a specialized nest parasite of attines and is found most often in nests of *Cyphomyrmex cornutus* Kempf (Adams & Longino 2007). It cohabits with *C. cornutus* in their nests, feeding on both host brood and the host's fungal symbiont.

Comments. See further discussion under *M. mondaboroides*.