

A checklist of the ants (Hymenoptera: Formicidae) of the department of Antioquia, Colombia and new records for the country

Lista de las hormigas (Hymenoptera: Formicidae) del departamento de Antioquia, Colombia, y nuevos registros para el país

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ABSTRACT

Antioquia is a state (department) of Colombia, located in the northwestern Andes of South America. Geologically, the northwestern region of the Western Range in Antioquia and Chocó includes the fault resulting from the connection between the Isthmus of Panamá and South America. The Occidental and Central cordilleras in Colombia are characterized by a number of reliefs, valleys and water basins, containing historical biological refuges and endemisms. In this study, we present the first species-level checklist of the 255 species (in 64 genera and 14 subfamilies) of ants currently known in Antioquia. One hundred and fifty-two (152) species had previously been registered for the state in different publications. Here, 103 additional species are recognized. Most of these species are distributed in other bioregions of the country as well. Forty-six percent are present in the Amazon Province and 36% in the Colombian Orinoco River basin. Less than 3% are found in the arid lands of the Colombian Caribbean area, Guyana, and the Colombian Pacific Province, plus the Caribbean islands. Sixty-three percent of the species are shared with Costa Rica. Our checklist constitutes the largest roster of ants at the species level for a state in Colombia to date and constitutes the beginning of the assessment of ant diversity in Antioquia. Many more field trips are necessary to gain a better understanding of the ant composition of this state. The following 13 species are new to the records for Colombia: *Azteca diabolica*, *Camponotus amoris*, *C. eurynotus*, *C. pachylepis*, *C. propinquus*, *C. tonduzi*, *Cerapachys toltecus*, *Cylindromyrmex whymperi*, *Myrmicocrypta urichi*, *Pheidole angulifera*, *Pseudomyrmex lisus*, *Solenopsis subterranea* and *Trachymyrmex zeteki*.

Key words: taxonomy, composition, biodiversity, biogeography.

RESUMEN

Antioquia es un departamento de Colombia localizado en los Andes más noroccidentales de Suramérica. Geológicamente, la región noroccidental de la Cordillera Occidental en Antioquia y Chocó contiene la falla resultante de la unión entre el Istmo de Panamá y Sudamérica. Las cordilleras Occidental y Central de Colombia se caracterizan por presentar una cantidad importante de relieves, valles y cuencas hidrográficas compuestas por refugios biológicos históricos y endemismos. En este estudio se presenta la primera lista de las 255 especies (64 géneros, 14 subfamilias) de hormigas hasta ahora conocidas para Antioquia. Ciento cincuenta y dos (152) especies están previamente registradas en diferentes publicaciones. Aquí se reconocen otras 103 especies. La mayoría de las especies están también distribuidas en otras biorregiones del país. Cuarenta y seis por ciento de las especies también se presentan en la provincia del Amazonas, y 36% también en la Orinoquía. Menos del 3% son compartidas con las tierras áridas del Caribe colombiano, Provincia de la Guyana y las islas colombianas del Pacífico y el Caribe. Sesenta y tres por ciento de las especies se comparten con Costa Rica. Esta lista constituye el mayor registro de hormigas al nivel de especie para un departamento de Colombia; aun así, éste es el inicio de la estimación de la diversidad de especies de hormigas de Antioquia. Muchos más trabajos de campo son necesarios para alcanzar un mejor entendimiento de la composición de la mirmecofauna de este departamento. Las siguientes 13 especies son nuevos registros para Colombia: *Azteca diabolica*, *Camponotus amoris*, *C. eurynotus*, *C. pachylepis*, *C. propinquus*, *C. tonduzi*, *Cerapachys toltecus*, *Cylindromyrmex whymperi*, *Myrmicocrypta urichi*, *Pheidole angulifera*, *Pseudomyrmex lisus*, *Solenopsis subterranea* and *Trachymyrmex zeteki*.

Palabras clave: taxonomía, composición, biodiversidad, biogeografía.

Introduction

The recognition of species is a primary necessity in biology. Studies and programs in developmental, conservation and applied biology require taxonomy as a scientific founda-

tion. Species possess unique biological characteristics with regards to distribution, ecology, and behavior. Ecological conclusions are partial or distorted if taxonomic information is incomplete (Prance, 1986; Vélez, 1990).

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Out of the 21 worldwide ant subfamilies, 15 are recognized as being from the Neotropics, including Agroecomyrmecinae, Amblyoponinae, Paraponerinae, Ponerinae, Proceratiinae, Cerapachyinae, Ecitoninae, Leptanilloidinae, Pseudomyrmecinae, Dolichoderinae, Ectatomminae, Heteroponerinae, Formicinae, Martialinae, and Myrmicinae (Bolton, 2003; Ward 2007). Within these subfamilies, 123 genera and 3,100 species are recognized as belonging to the Neotropics (Fernández and Sendoya, 2004). Colombia contains 14 subfamilies, 99 genera, and 806 species of ants (Fernández *et al.*, 1996a, 1996b; Fernández and Baena, 1997; Palacio, 1997; Brandão *et al.*, 1999; Fernández and Palacio, 1999; Ward, 1999; Fernández, 2000, 2001, 2002a, 2002b, 2004a, 2004b; Longino and Snelling, 2002; Serna, 2002; Arias-Penna, 2003, 2006, 2007; Wilson, 2003; Zabala *et al.*, 2003, 2006; LaPolla, 2004; Feitosa and Brandão, 2008; Guerrero and Olivero, 2007; Lattke *et al.*, 2007a,b; Longino, 2007; Mackay *et al.*, 2007; Sossa-Calvo and Longino 2007; Vergara-Navarro *et al.*, 2007; Wild, 2007; Fernández and Guerrero, 2008; Guerrero and Fernández, 2008; Fernández and Wilson, 2008; Galvis and Fernández, 2009; Guerrero, 2009; Guerrero *et al.*, 2010; Guerrero and Sanabria, 2011). The first ant checklist for Colombia was published by Fernández *et al.* (1996b). For a particular state, Chacón de Ulloa *et al.* (1996) produced a list of 94 ant species for Valle del Cauca, another Colombian state south of Antioquia.

Antioquia is a state (department) of Colombia, located in the northwestern Andean region of the country, in the northwestern Andes of South America (Fig. 1). Antioquia is part of the Colombian Andean block, where tectonic forces are released as a result of the collision of the Nazca, Caribbean, and South America plates. A subduction zone between the Nazca and South America plates formed the Western Range (Toro-Villegas, 2006; IGAC, 2007). The northwestern region of the Western Range in the states of Antioquia and Chocó (Colombia) contains the fault resulting from the connection between the Isthmus of Panamá and South America (Parra, pers. comm. 2011). The Western Range is the new continental border with the Pacific Ocean.

The Antioquian territory and its location are the result of different confluent rock systems. The rocks were shaped through different geological periods, including the Precambrian, Proterozoic, Paleozoic, Mesozoic, and Cenozoic periods (Toro-Villegas, 2006).

The state occupies an area of approximately 63,000 km² and comprises almost 6% of the Colombian territory. Eighty-five percent of the state is configured as mountains ranges (IGAC, 2007). From the Southern to Northern Andes, two

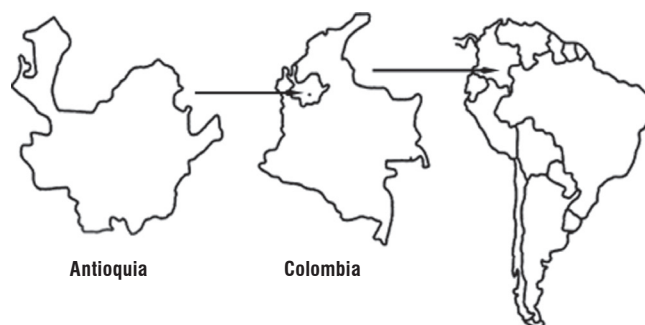


FIGURE 1. Location of the state of Antioquia, Colombia.

mountain ranges (Western and Central) enter Antioquia, separated by the Cauca River. The western range branches northward into three distinct serranías (mountain ranges): Abibe (western), San Jerónimo (central) and Ayapel (eastern). The Central Cordillera branches into two mountain ranges separated by the Porce River, forming a U-shaped valley where the city of Medellín is situated. The valleys formed by the Cauca and Magdalena Rivers in Antioquia are located at around of 1,000 m a.s.l. The Central Cordillera fades out northward into the serranía of San Lucas in Southern Bolívar, a state east of Antioquia. The Occidental and Central cordilleras are characterized by a number of reliefs, valleys and water basins containing historical biological refuges and endemisms (Espinal, 1992; Hernández *et al.*, 1992; Lozano-Zambrano *et al.*, 2007; IGAC, 2007). Antioquia is considered to be part of the biogeographical provinces of Chocó, Magdalena, and Cauca (Morrone, 2006). From an administrative point of view, Antioquia encompasses nine subregions, with 125 municipalities (SAA, 2002; IGAC, 2007).

In the pertinent literature, 152 recorded species of ants from Antioquia were found, belonging to 48 genera and 11 subfamilies (Weber, 1940; Brown, 1965; Kempf, 1972; Fernández, 1990, 1991; Schneider, 1990; Fernández *et al.*, 1996b; Lattke, 1997; Brandão *et al.*, 1999; Palacio, 1999; Serna, 1999; Yepes *et al.*, 1999; Ward, 1999; Gómez, 2001; Serna and Vergara-Navarro, 2001; 2007a, 2007b; Cárdenas, 2002; Longino and Snelling, 2002; Serna, 2002; Toro, 2002; Longino 2003; Wilson, 2003; LaPolla, 2004; Vahos, 2004; Aponte-Cubides, 2006; Zabala *et al.*, 2006; Arias-Penna, 2007; Lattke *et al.*, 2007a, 2007b; Mackay *et al.*, 2007; Sossa-Calvo and Longino, 2007; Vergara-Navarro *et al.*, 2007; Wild, 2007). Some of the aforementioned studies involved the recognition of a new species, *Octostruma impressa* (Myrmicinae) (Palacio, 1997), and two recent species were registered for Colombia: *Stegomyrmex manni* (Myrmicinae) (Serna, 2002), and *Leptanilloides biconstricta* (Leptanilloidinae) (Zabala *et al.*, 2006).

Several studies involving ant ecology have recently been carried out in the state, including Vergara-Navarro *et al.* (2007), Vahos (2004), Serna and Vergara-Navarro (2001, 2007a, 2007b), Toro (2002), Serna (1999), and Amarillo (1999). Despite our knowledge of species records for 75% of the municipalities, collections are still meager and the vast majority of these records does not follow the recommendations for standard ant sampling suggested in the ALL protocol (Alonso and Agosti, 2000). Samplings adhering to the protocol, or nearly so, have been applied in the following localities: Porce, the municipality of Amalfi (Serna, 1999), Aburrá Valley, municipalities of Medellín and Envigado (Toro, 2002; Vergara-Navarro *et al.*, 2007), and El Retiro (Vahos, 2004). In this paper, based on the project “Ants of Antioquia”, we present an ant checklist from 94 municipalities. The main aim of the present study was to produce the first taxonomic species-level checklist of the ants in Antioquia.

Materials and methods

Within the elapsed period of 1995-2010, the authors of the present paper and collaborators collected and identified ant specimens from different localities. For curatorial process of dried and in-alcohol preserved specimens, we followed the standard procedures of the Museo Entomológico UNAB and Lattke (2000). In addition, specimens housed in the following collections were examined: “Museo Entomológico UNAB” (Universidad Nacional Agronomía Bogotá); MEFLG (UNCM) (“Museo Entomológico Francisco Luis Gallego”, Universidad Nacional de Colombia, Medellín); IAvH (“Instituto Alexander von Humboldt”); CEUA (“Colección Entomológica Universidad de Antioquia”); MEPB (“Museo Entomológico Piedras Blancas”); MEMB (“Museo Entomológico Marcial Benavides”); Laboratory of Entomology (Universidad de la Paz, Barrancabermeja); (Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá); MPUJ (“Museo de Historia Natural Pontificia Universidad Javeriana”); MZSP (“Museu de Zoologia da Universidade de São Paulo”); CWEM (William and Emma Mackay Collection, The University of Texas at El Paso, TX). In 1999 and 2000, in the Antioquian localities of Porce, Santo Domingo, and Santa Fé de Antioquia, Serna and Vergara carried out three studies based on the ALL protocol. The results of those studies were included in the present work as well.

Specimens representing 70% of the species herein recorded are housed in the UNAB museum. At different collections and museums, we were able to examine, compare, and confirm all species herein cited.

In this study, previously recorded species were included for Antioquia and the following literature was consulted to identify specimens of different subfamilies (Ectatomminae, Paraponerinae, Proceratiinae, Heteroponerinae, Amblyoponinae and Ponerinae): Brown (1958, 1975, 1976), Fernández (1990), Wild (2005), Lattke *et al.* (2007a,b); Dolichoderinae: Mackay (1993); Formicinae: LaPolla (2004); Myrmicinae: Brandão (1990), Bolton (2000), Longino (2003), and Wilson (2003).

For the recognized species, their geographic distribution in Colombia was also of interest, based on the biogeographic units considered by Hernández *et al.* (1992). For species-level identification, all the Colombian states recorded in the literature were combed. Maps of these states were superimposed onto the biogeographic unit maps of Hernández *et al.* (1992). Species are recorded for the following biogeographic units of Colombia (see Taxonomic checklist) considered by Hernández *et al.* (1992): TIOC “Territorios Insulares Oceánicos Caribeños”; TIOP “Territorios Insulares Oceánicos del Pacífico”; CAP, “Cinturón Árido Precaribeño”; MSN “Macizo de la Sierra Nevada de Santa Marta”; PCM, “Provincia del Chocó-Magdalena”; PO, “Provincia de la Orinoquía”; PG, “Provincia de la Guyana”; PA, “Provincia de la Amazonía”; and PN, “Provincia Norandina”.

Results and discussion

Approximately 5,600 specimens were evaluated. In Tab. 1, there is a comparison of genera and species richness for each subfamily involving Antioquia, Colombia and the Neotropics (Hernández *et al.*, 1992; Lozano-Zambrano *et al.*, 2007). It is striking that, excluding Martialinae, the subfamilies recorded for the entire Neotropics are present in Antioquia. Twenty two genera and 91 species are cited here as new records for Antioquia. The composition (ant checklist) of species of Antioquia is included in List 1.

In this study, a species-level checklist for the 255 species currently known for Antioquia, Colombia is provided. Considering the few studies carried out to date, this finding represents a significant number of species. The composition of species includes 93, 53 and 8% of the subfamilies, genera and species, respectively, known to exist in the Neotropics, and 100, 65 and 30% of the subfamilies, genera and species of Colombia. The subfamily Myrmicinae, with 87 species, constitutes 34% of the species in Antioquia. The poneroid and formicoids, ectaheteromorphs groups, *sensu* Ward (2007): Amblyoponinae, Ponerinae, Ectatomminae, Heteroponerinae, Paraponerinae, Proceratiinae and Agroecomyrmecinae, account for 18 genera and 68 species (26%).

Camponotus (31 species, 12%), *Pseudomyrmex* (26 species, 10%), and *Pachycondyla* (20 species, 8%) are the three most represented genera. Fifty-nine percent of the species are shared with the North Andean Province (PN), 40% with the Amazon Province (PA), while 35% are shared with the Orinoquia Province (PO). Less than 25% of the species are shared with a belt of arid lands in the Caribbean coast of Colombia, Guyana province, and the island territories.

Sixty-three percent of the species of Antioquia are shared with Costa Rica, which is a country in close vicinity and the most consistently ant-surveyed country in Latin American (Longino 2011). Close to 900 species are recorded for Costa Rica and 255 species are herein recorded for Antioquia. Despite the fact that 63% of the ants from Antioquia are shared with Costa Rica, there exists a high likelihood that this shared percentage will be considerably reduced when more ants are identified and sampling in Antioquia is intensified. The current wide distribution of several genera considered herein is recorded as the result of the Great American Biotic Interchange of species, after the closing of the Isthmus of Panama in the late Pliocene Period (Kimsey, 1992). Brown (1973) recorded the following genera moving through the Isthmus as a result of the interchange: *Atta*, *Azteca*, *Cylindromyrmex*, *Ectatomma*, *Acanthoponera*, *Paraponera*, and *Thaumatomyrmex*.

Lozano-Zambrano *et al.* (2007) studied the biogeography of the poneroids *Paraponera* and *Thaumatomyrmex* and the formicoids Ectatomminae (*Ectatomma* included) and Heteroponerinae (*Acanthoponera* included) in Colombia. Lozano-Zambrano *et al.* (2007) found that there is not a clear correspondence between their study and Hernández *et al.* (1992), regarding the Colombian natural regions. There is a separation of two large groups of these ants with 50% similarity between the Andean region, including Biogeographic Chocó (states of Nariño through Antioquia), the Cauca River valley, and the Central and Eastern Mountain Ranges and a second group encompassing Orinoquia and Amazonia. Our study was similar to that of Lozano-Zambrano *et al.* (2007) because 40% of the species found in Antioquia (Andean region) are also present in the Amazon (PA) and 35% in Orinoquia (PO).

Antioquia was part of the Chocó-Magdalena province (Hernández *et al.*, 1992). This province was subsequently divided into the present-day provinces of Chocó, Magdalena, and Cauca (Morrone, 2006). The Chocó province extends from Ecuador to Panamá, the Magdalena province extends from Colombia to Venezuela, and the Cauca province is comprised of western Colombia and Ecuador (Morrone,

2006). The recent geological events related to the closing of the Panamanian Isthmus, 2.5 mya (millions of years ago), and the elevation of the Andes, which at least for the Eastern Cordillera was no more than 40% of its modern elevation at 4 mya (Gregory-Wodzicki, 2000), possibly account for an early wide-distribution of species in the lowlands and further isolation of the species due to the elevation of the Andes and the climate changes in the Pleistocene Period (Lattke, 2003). Hypothetically, in the eastern territory of Colombia (Orinoquia, Llanos and Amazon), 35% of the species recorded herein and shared among Antioquia (PCM), Orinoquia (PO) and Amazonas (PA) may have been connected when low elevations dominated the landscapes between the Central and Oriental Cordilleras during the middle of the Miocene through the early Pliocene Periods (Gregory-Wodzicki, 2000; Lozano-Zambrano *et al.*, 2007).

The strategic geographical location of the state, between the Isthmus of Panama, the Province of Chocó, the Andes Range Mountains, and the Province of Magdalena, provides Antioquia with special conditions for biodiversity. The high representation of ant subfamilies and genera found in this study suggests that Antioquia is a state remarkably rich in species and, therefore, it is necessary to intensify collecting trips to obtain a better understanding of the composition of these lineages in Antioquia and Colombia as a whole.

Thirteen species herein encountered for the state of Antioquia are registered for the first time for Colombia. The data of these new records are as follows: *Camponotus amoris*. One worker. COLOMBIA. **Antioquia:** Alejandría, November 1974, R. Vélez (MEFLG). **Antioquia:** Andes, May 1987, M. Hernández (MEFLG) (previously recorded for Brazil: Forel, 1904). *Camponotus eurynotus*. One worker, one gyne. COLOMBIA. **Antioquia:** Amalfi, Cañón del Porce, Tenche, 6°46.3' N 75°5.0' W, bosque, 3 July, 1998, dosel, F. Serna (MEFLG) (previously recorded for Brazil: Forel, 1907). *Camponotus integellus*. One worker. COLOMBIA. **Antioquia:** Parque Nacional Orquídeas, 1,430 m a.s.l., 4 April 1996, E. Palacio (IAVH) (previously recorded for Costa Rica: Forel, 1899). *Camponotus orthocephalus*. Three workers. COLOMBIA. **Antioquia:** Medellín, 29 May, 1940. *Cattleya pseudobulbs*, EQA 72362, Lot # 40-11865 (USNM). Three workers. COLOMBIA. **Antioquia:** without locality, 29 April 1941, *Cattleya*, Hoboken #1262, Lot # 41-7365 (USNM) (previously recorded for Brazil: Emery, 1894). *Camponotus pachylepis*. Two workers, two gynes. COLOMBIA. **Antioquia:** Medellín, 1,800 m a.s.l., 23 July 1938, N. Weber (MCZC) (previously recorded for Brazil: Emery, 1894). *Camponotus propinquus*. Three workers, four gynes. COLOMBIA. **Antioquia:** Río Porce, 1,020 m a.s.l.,

23 July 1938, *N. Weber* (MCZC). *Camponotus tonduzi*. One worker. COLOMBIA. **Antioquia**: Amalfí, Cañón del Porce, Tenche, 6°46.3' N 75°5.0' W. Forest, 3 August 1998, *F. Serna* (MEFLG) (previously recorded for Costa Rica: Forel, 1899). *Pseudomyrmex lisus*. One worker. COLOMBIA. **Antioquia**: Venecia, Bolombolo rural lane, La Cascada farm, 7 km to Venecia, 1,350 m a.s.l., 5°58' N 75°44' W, August 2004, *J.E. Arango*, in *Ceiba pentandra* (Bombacaceae)-ceiba de agua (UNAB 3191) (previously recorded for Costa Rica: Ward, 2008). *Cerapachys toltecus*. 4 workers. COLOMBIA. **Antioquia**: Amalfí, Cañón del Porce, 980 m a.s.l. 6° 46,661' N 75° 05,382' W, 27 October 1997, *F. Serna* (UNAB 3549, MEFLG 6936, 5714) (previously recorded for Guatemala and Belice: Brown, 1975). *Cylindromyrmex whymperi*. Two workers. COLOMBIA. **Antioquia**: Amalfí, Cañón del Porce-Normandía, 1,045 m a.s.l., 6°46,661' N 75°05,382' W, 27 October 1997, *F. Serna* (UNAB 3550, MEFLG 5715) (previously recorded for Panamá and Ecuador: Brown, 1975). *Myrmicocrypta urichi*. 15 workers. COLOMBIA. **Antioquia**: Santafé de Antioquia, El Espinal rural lane, Cotové farm, 6°33'32" N 77°04'51" W, 600 m a.s.l., 6 October 2000, *E. Vergara* and *F. Serna* (UNAB) (previously recorded for Trinidad: Weber, 1945). *Solenopsis subterranea*. Ten workers. COLOMBIA, **Antioquia**: Carepa, 22 April 2010, *D. Restrepo* (UNAB 3559) (previously recorded for Texas: Mackay and Vinson, 1989; Costa Rica: Longino, 2005). *Pheidole angulifera*. Five workers. COLOMBIA. **Antioquia**: Turbo, Currulao, 13 May 2010, *D. Restrepo* (UNAB 3560) (previously recorded for Costa Rica: Wilson, 2003). *Azteca diabolica*. One gyne. COLOMBIA. **Antioquia**: Amalfí, Cañón del Porce, 1997. *F. Serna* (MEFLG) (previously recorded for

Panamá: Guerrero *et al.*, 2010). *Trachymyrmex zeteki*. Four workers. COLOMBIA. **Antioquia**: Amalfí, Cañón del Porce, 1997. *F. Serna* (UNAB) (previously recorded for Panamá: Weber, 1940, 1958).

List 1. Taxonomic checklist of species of Formicidae in Antioquia, Colombia, and the localities where they have been found. Subfamilies, genera, and species are organized alphabetically. Nomenclature is based on Bolton *et al.* (2006). CAP, MSN, PA, PCM, PG, PN, PO, TIOC, and TIOP indicate the biogeographic units of Colombia (Hernández *et al.*, 1992) (explained in materials and methods) where species have been previously reported. "New Records for Colombia" and species without a citation reference are recorded here for the first time for Antioquia.

AGROECOMYRMECINAE

Tatuidris tatusia Brown and Kempf, 1968. Támesis, Otra banda rural lane, El Alcazar farm: 1,800 m a.s.l.

AMBLYOPONINAE

Stigmatomma lurilabes Lattke, 1991. Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (CAP, PCM, PO, PN and PG). Amalfí, Cañón del Porce: 980 m a.s.l.

Prionopelta amabilis Borgmeier, 1949. Arias-Pennas (2007) (PCM, PA and PN). Amalfí, Cañón del Porce: 980 m a.s.l.

Prionopelta antillana Forel, 1909. Serna and Vergara-Navarro (2007a) (CAP, PCM, PA and PN) Amalfí, Cañón del Porce: 980 m a.s.l.

TABLE 1. Number of genera (Gen.) and species (spp.) of Formicidae of each subfamily in the Neotropics, Colombia and Antioquia. * indicates number of genera recorded for Antioquia within each subfamily; (): between parentheses is the number of genera recorded for the first time for Antioquia.

Region	Neotropics		Colombia		Antioquia		
	Subfamilies	Genera	spp.	Genera	spp.	Genera	spp.
Martialinae		1	1				
Dolichoderinae		8	223	6	73	5	19
Formicinae		15	416	8	92	5* (4)	37
Pseudomyrmecinae		2	139	2	61	1	26
Cerapachyinae		4	39	3	8	2	3
Ecitoninae		5	137	5	43	5	13
Leptanilloidinae		2	8	1	3	1	2
Amblyoponinae		3	22	2	7	2	4
Ponerinae		12	262	11	113	6* (5)	36
Ectatomminae		3	121	3	65	3	20
Heteroponerinae		2	17	2	6	2	3
Paraponerinae		1	2	1	1	1	1
Proceratiinae		3	32	3	14	3	3
Agroecomyrmecinae		1	1	1	1	1	1
Myrmicinae		58	1598	50	358	27* (13)	87
Total		120	3018	98	845	64* (22)	255

Prionopelta modesta Forel, 1909. Arias-Penna (2007), Vergara-Navarro *et al.* (2007), Serna and Vergara-Navarro (2007a) (PCM, PO and PN). Amalfí, Cañón del Porce: 980 m a.s.l.

CERAPACHYINAE

Cerapachys toltecus Forel, 1909. New record for Colombia (PCM). Amalfí, Cañón del Porce: 980 m a.s.l.

Cylindromyrmex schmidti (Menozzi, 1931). Amalfí, Cañón del Porce-Normandia: 1,045 m a.s.l.

Cylindromyrmex whymperi Cameron, 1891. New record for Colombia (PCM). Amalfí, Cañón del Porce: 980 m a.s.l.

DOLICHODERINAE

Azteca diabolica Guerrero, Delabie and Dejean, 2010. New record for Colombia (PCM). Amalfí, Cañón del Porce: 980 m a.s.l.

Dolichoderus attelaboides (Fabricius, 1775) (PCM, PA and PN). Santafe de Antioquia: 550 m a.s.l. Gómez Plata: 1,828 m a.s.l. Sopetrán: 750 m a.s.l. San Luis: 1,075 m a.s.l. Envigado: 1,573 m a.s.l. Amagá: 1332 m a.s.l. Amalfí, Cañón del Porce-Santa Lucia: 950 m a.s.l. Puerto Triunfo: 115 m a.s.l. Apartado: 5 m a.s.l. Santo Domingo: 1,100 m a.s.l. Valdivia: 1,165 m a.s.l.

Dolichoderus baenae Mackay, 1993. Schneider (1990) (CAP, PCM, PO, PA and PN). Amalfí, Cañón del Porce: 980 m a.s.l.

Dolichoderus bispinosus Olivier, 1792. Serna (1999) (CAP, PCM, PO, PA and PN). Amalfí, Cañón del Porce: 980 m a.s.l.

Dolichoderus curvilobus (Lattke, 1987) (PCM, PA, PN). Anorí, Estación Biológica Río Anorí

Dolichoderus debilis (Emery, 1890) (PCM). Amalfí, Cañón del Porce: 980 m a.s.l.

Dolichoderus decollatus Smith, 1858. Schneider (1990), Serna (1999) (CAP, MSN, PCM, PO, PA and PN). Amalfí, Cañón del Porce: 970 m a.s.l. Amalfí, Cañón del Porce-San Ignacio: 970 m a.s.l. Yolombó, Porce (Normandia): 1010 m a.s.l. Cocorná, La Vetá rural lane, San Antonio stream, San Luis “El Refugio, Cañón de Río Claro”: 515 m a.s.l.

Dolichoderus diversus (Emery, 1894) (PCM and PN). San Luis, San Pablo, San Antonio stream: 780 m a.s.l.

Dolichoderus ghilianii Emery, 1894. Serna (1999) (PCM, PA and PN). Santo Domingo, Porce: 1,000 m a.s.l., Santo Domingo: Porce: 1,100 m a.s.l., Amalfí, Cañón del Porce-La Calandría: 1,010 m a.s.l.

Dolichoderus gibbosus (Smith, 1858) (PCM). Amalfí, Cañón del Porce: 980 m a.s.l.

Dolichoderus imitator Emery, 1894. Schneider (1990), Serna (1999) (PCM, PO, PA and PN) Amalfí, Cañón del Porce: 980 m a.s.l., San Luis “El Refugio, Cañón de Río Claro”: 515 m a.s.l.

Dolichoderus piceus (Mackay, 1993) (PCM and PN). Amalfí, Cañón del Porce-La Calandría: 1,010 m a.s.l.

Dolichoderus quadridenticulatus Roger, 1862. Serna (1999) (PCM, PA and PN). Puerto Triunfo: 150 m a.s.l., Mutata: 66 m a.s.l. San Luis: 1,075 m a.s.l., Puerto Triunfo, Río Claro: 200 m a.s.l. Amalfí, Cañón del Porce-Fosforito: 945 m a.s.l.

Dolichoderus schulzi Emery, 1894. Schneider (1990), Fernández *et al.* (1996a) (PCM, PA and PN). Medellín: 1540 m a.s.l.

Dolichoderus superaculus Lattke, 1987. Schneider (1990), Fernández *et al.* (1996a) (PCM, PA and PN). Remedios: 680 m a.s.l.

Dorymyrmex brunneus Forel, 1908. Vergara-Navarro *et al.* (2007) (PCM, PA and PN). Amalfí, Cañón del Porce: 980 m a.s.l.

Linepithema iniquum Mayr, 1870. Wild (2007) (PCM, PN and CAP). Amalfí, Cañón del Porce: 980 m a.s.l.

Linepithema piliferum (Mayr, 1870) (PCM and PN). Medellín, Alvernia: 2,400 m a.s.l. Puerto Nare, Nare river: 800 m a.s.l.

Tapinoma melanocephalum Fabricius, 1793. Serna (1999), Vergara-Navarro *et al.* (2007) (PCM, PO and PN). San Carlos, El Jordán rural lane: 1,010 m a.s.l. Gómez Plata, La Clara rural lane, Vegas de la Clara farm: 1,080 m a.s.l. Caucasia: 50 m a.s.l. Medellín: 1,496 m a.s.l. Amalfí, Cañón del Porce-Santa Lucia: 950 m a.s.l.

ECITONINAE

Cheliomyrmex andicola Emery, 1894. Fernández *et al.* (1996a), Serna (1999), Toro (2002) (PCM, PA and PN). Gómez Plata: 1,828 m a.s.l. Medellín: 1,538 m a.s.l. Santafe de Antioquia, La Contadora, Las Flores farm: 550

m a.s.l. Rionegro: 2,120 m a.s.l. Santafé de Antioquia: 550 m a.s.l. Santo Domingo Porce: 1,300 m a.s.l. Amalfi, Cañón del Porce-Tenche: 1,000 m a.s.l. Medellín, Santa Elena rural lane: 2,300 m a.s.l. Támesis, La Virgen rural line: 1,500 m a.s.l. Copacabana, El Cabuyal rural line: 1,650 m a.s.l. Rionegro: 2,120 m a.s.l.

Eciton burchelli (Westwood, 1842) (PCM, CAP, PO, PA and PN). Palacio (1999), Serna (1999). Santafé de Antioquia: 550 m a.s.l. Santo Domingo, Porce: 1,100 m a.s.l. Andes: 1,357 m a.s.l. Cisneros: 1,038 m a.s.l. Concepción: 1,862 m a.s.l. Ebéjico: 1,150 m a.s.l. Amalfi, Cañón del Porce-La Cancana: 1,010 m a.s.l. Támesis, La Matilde and La Fabiola rural lanes: 1,770 m a.s.l. San Luis: 1,050 m a.s.l. Santa Barbara, Versalles rural lane, Los Naranjos farm: 1,700 m a.s.l. Amagá: 1,332 m a.s.l. Cocorná: 1,200 m a.s.l.

Eciton hamatum Fabricius, 1782. Palacio (1999) (PCM, CAP, PA and PN). Murindo: 23 m a.s.l. Frontino: 900 m a.s.l. Amalfi, Cañón del Porce-Normandia: 1,000 m a.s.l. Puerto Triunfo, Río Claro: 1,50 m a.s.l. San Carlos: 1,010 m a.s.l. Remedios: 580 m a.s.l. Medellín, San Antonio de Prado: 1,800 m a.s.l. San Luis “El Refugio, Cañón de Río Claro”: 515 m a.s.l.

Eciton jansoni Forel, 1912. Palacio (1999) (PCM and PN). La Estrella: 1,775 m a.s.l.

Eciton vagans Olivier, 1792. Palacio (1999) (PCM, CAP, PO, PA and PN). Santafé de Antioquia, Cotove farm: 607 m a.s.l. Medellín: 1,496 m a.s.l. Cocorná: 1,286 m a.s.l. Támesis, El Barro, La Colina: 1,520 m a.s.l. San Luis “El Refugio, Cañón de Río Claro”: 515 m a.s.l.

Labidus coecus Latreille, 1802. Palacio (1999), Serna (1999), Toro (2002) (PCM, CAP, PA and PN). Amalfi, Cañón del Porce-Fosforito: 970 m a.s.l. Santafé de Antioquia, Cotove farm: 607 m a.s.l. Copacabana: 1,425 m a.s.l. Medellín: 1,538 m a.s.l. San Luis: 1,075 m a.s.l. Amalfi, Cañón del Porce-La Picardia: 975 m a.s.l. Caldas: 1,789 m a.s.l. Támesis, La Virgen and La Cumbre rural lanes: 1,610 m a.s.l. Medellín: 1,445 m a.s.l. Caucasia, La Candelaria rural lane, La Candelaria U de A farm: 80 m a.s.l. Ciudad Bolívar, Alferez district: 1,500 m a.s.l.

Labidus praedator Smith, 1858. Palacio (1999), Toro (2002) (PCM, PA and PN). Amalfi, Cañón del Porce-Fosforito: 970 m a.s.l. Medellín: 1,538 m a.s.l. Rionegro: 2,120 m a.s.l. Amagá: 1,392 m a.s.l. Andes: 1,357 m a.s.l. Envigado: 1,575 m a.s.l. San Francisco: 1,050 m a.s.l. San Pedro: 2,000 m a.s.l. Medellín, Robledo La Campiña district: 1,534 m a.s.l. Cocorná: 1,200 m a.s.l. Támesis: 1,200 m

a.s.l. Betania: 1,550 m a.s.l. Santo Domingo: 1,950 m a.s.l. Amalfi, Cañón del Porce: 970 m a.s.l.

Labidus spininodis Emery, 1890. Palacio (1999) (PCM, PA and PN). Támesis, La Virgen and La Cumbre rural lanes: 1,610 m a.s.l. Támesis, Hacha La Miranda: 1,490 m a.s.l.

Neivamyrmex halidaii Shuckard, 1840 (PCM and PN). Medellín: 1,534 m a.s.l. Bello Fontidueño: 1,495 m a.s.l. Caucasia, La Candelaria rural lane, La Candelaria U de A farm: 80 m a.s.l. Santo Domingo Porce: 1,100 m a.s.l.

Neivamyrmex planidorsus (Emery, 1906) (PCM and PN). Amalfi, Cañón del Porce-Fosforito: 970 m a.s.l.

Neivamyrmex rosenbergi Forel, 1911. Palacio (1999) (PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Nomamyrmex esenbeckii Westwood, 1842. Palacio (1999), Serna (1999) (CAP, PCM, PO, PA and PN). Fredonia, Marsella rural lane: 1,800 m a.s.l. Titiribi, Otra mina rural lane: 1,550 m a.s.l. Amalfi, Cañón del Porce-La Calandria: 1,010 m a.s.l. San Francisco: 1,050 m a.s.l. Támesis, San Nicolas rural lane: 1,510 m a.s.l. Santa Barbara: 1,846 m a.s.l. Gómez Plata, Normandia farm: 1,000 m a.s.l.

Nomamyrmex hartigii (Westwood, 1842) (PCM, PO and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

ECTATOMMINAE

Ectatomma brunneum Smith, 1858. Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PCM, PN, PA, MSN and PO). San Luis, San Pablo rural lane, San Antonio stream: 780 m a.s.l.

Ectatomma quadridens (Fabricius, 1793). Medellín: 1,538 m a.s.l.

Ectatomma ruidum Roger, 1860. Fernández, 1991, Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PCM, PN, PA, MSN, CAP, PO and PCM). Cisneros: 1,038 m a.s.l. Gómez Plata: 1,828 m a.s.l. Titiribi, Otra mina rural lane: 1,550 m a.s.l. Gómez Plata, La Clara rural lane, Vegas de la Clara farm: 1,080 m a.s.l. Urrao: 1,800 m a.s.l. Santo Domingo: 1,100 m a.s.l. Medellín: 1,538 m a.s.l. El Retiro: 2,169 m a.s.l. Sopetrán: 750 m a.s.l. San Luis: 1,075 m a.s.l. San Carlos: 1,010 m a.s.l. Chigorodo: 34 m a.s.l. San Jerónimo: 820 m a.s.l. Frontino, Parque Nacional Natural Las Orquideas: 900 m a.s.l. Apartado: 150 m a.s.l. Concepción: 1,862 m a.s.l. Santafé de Antioquia, Cotove farm: 600 m a.s.l. Yolombó, Cañón del Porce-Tenche: 1,010 m a.s.l. Amalfi, Cañón del Porce-La

Calandría: 1,010 m a.s.l. Remedios: 680 m a.s.l. Caucasia, La Candelaria farm: 50 m a.s.l. Turbo, Currulao rural lane (Urabá): 1 m a.s.l. Caucasia, La Candelaria U de A farm: 80 m a.s.l. Barbosa, El Hatillo rural lane: 1,308 m a.s.l. Jerico, Cauca Viejo rural lane: 400 m a.s.l. Bello Fontidueño: 1,495 m a.s.l. Cocorná, La Veta rural lane: 1,000 m a.s.l. San Jerónimo: 820 m a.s.l. Santa Barbara, La Pintada rural lane: 900 m a.s.l. San Luis, San Pablo rural lane, San Antonio stream: 780 m a.s.l.

Ectatomma tuberculatum Olivier, 1792. Fernández 1991, Fernández *et al.* (1996a); Serna and Vergara-Navarro (2007a) (PCM, PN, PA, MSN, CAP, PO and PCM). Santafe de Antioquia: 550 m a.s.l. Támesis, San Isidro rural lane: 1,200 m a.s.l. Medellín: 1,538 m a.s.l. Mutata: 66 m a.s.l. Turbo: 2 m a.s.l. Fredonia, Puente Iglesias rural lane: 1,800 m a.s.l. Santa Barbara, La Pintada rural lane: 1,846 m a.s.l. Sopetrán: 750 m a.s.l. Remedios: 1,063 m a.s.l. Turbo: 2 m a.s.l. Mutata: 66 m a.s.l. Yolombó, Porce (Normandia): 1,010 m a.s.l. Caucasia, La Candelaria rural lane, La Candelaria U de A farm: 80 m a.s.l. Maceo, reserve of Alicante river canyon: 80 m a.s.l. Cocorná, La Veta rural lane: 1,000 m a.s.l. Puerto Raudal, 1,750 m a.s.l. Amalfi, Cañón del Porce-La Calandría, Carepa, Tulenapa farm: 28 m a.s.l.

Gnamptogenys andina Lattke, 1995. Lattke *et al.* (2007) (PCM, PA, PN and PO). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys annulata Mayr, 1887. Lattke *et al.* (2007), Serna and Vergara-Navarro (2007a). (PCM, PN, PA and PO). Amalfi, Cañón del Porce: 970 m a.s.l.

Gnamptogenys continua Mayr, 1887. Lattke *et al.* (2007), Serna and Vergara-Navarro (2007a) (PCM, PN and PA). Amalfi, Cañón del Porce: 970 m a.s.l.

Gnamptogenys ejuncida Lattke, 1995. Lattke *et al.* (2007), Serna and Vergara-Navarro (2007a) (PCM, PA and PN). Cocorná, La Vetá rural lane, San Antonio stream.

Gnamptogenys haenschei Emery, 1902. Lattke *et al.* (2007) (PA, PCM, PO, CAP and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys hartmani Wheeler, 1915. Lattke *et al.* (2007) (PCM and PA). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys horni Santschi, 1929. Lattke *et al.* (2007), Serna and Vergara-Navarro (2007a) (PN, PA, PCM, PO and PG). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys mecotyle Brown, 1958. Lattke *et al.* (2007) (PCM and PA). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys minuta Emery, 1896. Lattke *et al.* (2007) (PCM, PA, CAP, MSN and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys mordax Smith, 1858. Lattke *et al.* (2007), Serna and Vergara-Navarro (2007a). (PCM, PN and PA). Frontino: 900 m a.s.l.

Gnamptogenys porcata Emery, 1896. Lattke *et al.* (2007) (PCM, PA, CAP and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys striatula Mayr, 1884. Lattke *et al.* (2007) (PCM, PO, PA, PN, CAP and PG). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys strigata Norton, 1868. Lattke *et al.* (2007), Serna and Vergara-Navarro (2007a) (PCM, PN, PA and PO). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys sulcata Smith, 1858. Lattke *et al.* (2007) (PCM, CAP, PA, MSN, PO and PG). Amalfi, Cañón del Porce: 980 m a.s.l.

Gnamptogenys triangularis Mayr, 1887 Lattke *et al.* (2007) (PCM and MSN). Amalfi, Cañón del Porce: 980 m a.s.l.

Typhlomyrmex pusillus Emery, 1894. Brown 1965, Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PCM, PN and PA). Venecia: 1,350 m a.s.l.

FORMICINAE

Acropyga fuhrmanni Forel, 1914. Fernández *et al.* (1996a), LaPolla (2004) (PCM and PO). Amalfi, Cañón del Porce-La Calandría: 990 m a.s.l. Puerto de Los Pobres: 720 m a.s.l.

Acropyga goeldii (Forel, 1893) (PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Acropyga smithii Forel, 1893. LaPolla (2004) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Brachymyrmex heeri (Forel, 1874) (PCM and CAP). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus amoris Forel, 1904. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus atriceps Smith, 1858. Gómez (2001), Vergara-Navarro *et al.* (2007) (PCM, PN, PA and PO). Betania: 1,550 m a.s.l. Sopetrán: 723 m a.s.l. Amagá: 1,332 m a.s.l.

Medellin, Universidad Nacional-Núcleo El volador: 1,593 m a.s.l. Fredonia: 1,900 m a.s.l. Tarazá: 108 m a.s.l. San Jerónimo: 750 m a.s.l. Andes: 1,357 m a.s.l. Vegachi: 980 m a.s.l. Amalfi, "Cañón del Porce, Campamento": 990 m a.s.l. Caucasia: 50 m a.s.l. San Luis "El Refugio, Cañón de Rio Claro": 515 m a.s.l.

Camponotus auricomus Roger, 1862 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus blandus Smith, 1858 (PCM). Santafe de Antioquia: 550 m a.s.l.

Camponotus brevis Forel, 1899 (PCM). Amalfi, Cañón del Porce: 1,020 m a.s.l. Amagá: 1,332 m a.s.l.

Camponotus bugnioni Forel, 1899. Cárdenas (2002), Vergara-Navarro *et al.* (2007) (PCM, CAP and MSN). Caucasia: 50 m a.s.l. Barbosa: 1,308 m a.s.l. Medellín: 1,538 m a.s.l. Bello: 1,495 m a.s.l. Arboletes: 10 m a.s.l. Carepa: 10 m a.s.l. Tarazá, Rayo river: 100 m a.s.l. San Pedro de Uraba: 8 m a.s.l.

Camponotus canescens Mayr, 1870 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus chartifex Smith, 1860. Fernández (2002a) (PCM, PA and PG). Puerto Triunfo, Rio Claro: 150 m a.s.l.

Camponotus coloratus Forel, 1904 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus coruscus Smith, 1862. Cárdenas (2002) (PCM). Amalfi, Cañón del Porce: 970 m a.s.l.

Camponotus eurynotus Forel, 1907. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus excisus Mayr, 1870 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus indianus Forel, 1879 (PCM and PN). San Andres de Cuerquia: 1,530 m a.s.l. Medellín: 1,700 m a.s.l. Frontino: 1,350 m a.s.l. Jardín: 1,805 m a.s.l. Caldas: 1,797 m a.s.l. Sopetrán, Santa Rita rural lane: 723 m a.s.l. Santa Barbara, Versalles rural lane, Los Naranjos farm: 1,846 m a.s.l.

Camponotus integellus Forel, 1899. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus lindigi Mayr, 1870 (PCM and PA). Santafe de Antioquia: 550 m a.s.l.

Camponotus linnaei Forel, 1886 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus mus Roger, 1863 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus nitens Mayr, 1870 (PCM and PN). San Luis: 1,075 m a.s.l.

Camponotus nitidior Santschi, 1921. Fernández (2002a) (PCM). Amalfi, Cañón del Porce-Tenche: 1,000 m a.s.l. Amalfi, Cañón del Porce: 990 m a.s.l.

Camponotus novogranadensis Mayr, 1870 (PCM, PO and PN). Amalfi, Cañón del Porce-El Encanto: 970 m a.s.l.

Camponotus orthocephalus Emery, 1894. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus pachylepis Emery, 1920. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus propinquus Mayr, 1887. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus raphaelis Forel, 1869 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus sericeiventris Guérin-Méneville, 1838 (PCM, PA and PN). Bolívar: 1,250 m a.s.l. Cáceres: 100 m a.s.l. San Luis: 1,075 m a.s.l. Valdivia: 1,165 m a.s.l. Mutata: 66 m a.s.l.

Camponotus sexguttatus Fabricius, 1793 (PCM, MSN, PN). Turbo: 10 m a.s.l.

Camponotus sphenoidalis Mayr, 1870 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus striatus Smith, 1862. Vergara-Navarro *et al.* (2007) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus substitutus Emery, 1894 (PCM, MSN, PO and PA). Sonson, La Violeta stream: 1,000 m a.s.l.

Camponotus tonduzi Forel, 1899. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Camponotus zoc Forel, 1879 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Nylanderia nodifera Mayr, 1870. Fernández *et al.* (1996) (PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Paratrechina longicornis Latreille 1802. Amalfi, Cañón del Porce: 980 m a.s.l.

HETEROPONERINAE

Acanthoponera mucronata Roger, 1860. Serna and Vergara-Navarro (2007a) (PCM, PN and PA). Amalfi, Cañón del Porce: 980 m a.s.l.

Heteroponera inca Brown, 1958. Serna and Vergara-Navarro (2007a) (PCM and PN). Amalfí, Cañón del Porce: 1,000 m a.s.l.

Heteroponera microps Borgmeier, 1957. Kempf (1972), Fernández (1990), Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PCM and PN). Amalfí, Cañón del Porce: 980 m a.s.l.

LEPTANILLOIDINAE

Leptanilloides biconstricta Mann, 1923. Zábala *et al.* (2006) (PCM). Amalfí, Cañón del Porce: 980 m a.s.l.

Leptanilloides sculpturata Brandão, Diniz, Agosti and Delabie, 1999. Brandão *et al.* (1999), Delabie (1999) (PCM). Amalfí, Cañón del Porce: 980 m a.s.l.

MYRMICINAE

Acromyrmex aspersus Smith, 1858. Fernández *et al.* (1996), Toro (2002) (PCM and PN). Granada: 2,050 m a.s.l. Rionegro: 2,137 m a.s.l. Caldas: 1,789 m a.s.l. La Ceja: 2,180 m a.s.l. Medellín, Bocana: 1,486 m a.s.l. Betania: 1,550 m a.s.l. Granada: 2,050 m a.s.l. Andes: 1,537 m a.s.l. Guarne: 2,143 m a.s.l. Marinilla: 2,100 m a.s.l. El Peñol: 1,900 m a.s.l. Santuario: 2,200 m a.s.l. La Estrella: 1,764 m a.s.l. Santuario: 2,200 m a.s.l. Támesis, La Matilde rural lane, La Fabiola farm: 1,850 m a.s.l.

Acromyrmex coronatus Fabricius, 1804. Toro (2002) (PCM, PO, PA and PN). Concepción: 1,862 m a.s.l.

Acromyrmex landolti Forel, 1885. Serna (1999) (CAP, PCM, PO and PN). Amalfí, Cañón del Porce: 970 m a.s.l. Santafe de Antioquia: 500 m a.s.l. Santo Domingo: 1,000 m a.s.l. Amalfí, Cañón del Porce-La Picardia: 975 m a.s.l. Sopetrán, Santa Rita rural lane: 723 m a.s.l.

Acromyrmex octospinosus Reich, 1793. Fernández *et al.* (1996a) (PCM, PO, PA and PN). Titiribi, Otra mina rural lane: 1,550 m a.s.l. Murindó, Chageradó: 23 m a.s.l. Bolívar: 1,230 m a.s.l. Cisneros: 1,038 m a.s.l. Amalfí, Cañón del Porce-Tenche: 1,000 m a.s.l. San Luis: 1,050 m a.s.l. Rionegro: 2,137 m a.s.l. San Francisco: 1,250 m a.s.l. Santafe de Antioquia: 550 m a.s.l. Yolombó: 1,495 m a.s.l. Frontino, Parque Nacional Natural Las Orquideas: 900 m a.s.l. Cisneros: 1,038 m a.s.l. Medellín: 1,560 m a.s.l. Cocorná: 1,200 m a.s.l. Dabeiba 450 m a.s.l. Sopetrán: 723 m a.s.l. Mutata: 66 m a.s.l. Támesis, San Nicolas farm: 1,500 m a.s.l. Gómez Plata: 1,080 m a.s.l. Apartadó, "Via a Carepa, Parque de los Encuentros": 30 m a.s.l.

Adelomyrmex myops Wheeler, 1910. Serna (1999) (PCM). Amalfí, Cañón del Porce-Normandia: 1,045 m a.s.l.

Apterostigma reburum Lattke 1997. Lattke (1997) (PCM). Amalfí, Cañón del Porce: 980 m a.s.l.

Atta cephalotes Linnaeus, 1758. Fernández *et al.* (1996a), Yepes *et al.* (1999), Vergara-Navarro *et al.* (2007) (CAP, MSN, PCM, PO, PA and PN) Angostura, Santa Ana rural lane: 1,637 m a.s.l. Ituango: 1,550 m a.s.l. Santafe de Antioquia: 550 m a.s.l. Arboletes: 10 m a.s.l. El Bagre, Arenales: 85 m a.s.l. Guadalupe: 1,850 m a.s.l. Medellín, Universidad Nacional-Núcleo El volador: 1,493 m a.s.l. Murindo, Indian reservation of the Embera Eyabida rivers and Chagerado Turriquitado: 23 m a.s.l. Gómez Plata, La Clara rural lane, Vegas de la Clara farm: 1,080 m a.s.l. Granada, Galilea rural lane: 2,050 m a.s.l. Támesis, San Isidro rural lane: 1,200 m a.s.l. Argelia: 1,750 m a.s.l. San Roque: 1,471 m a.s.l. San Rafael: 1,000 m a.s.l. Venecia: 1,350 m a.s.l. San Luis: 1,075 m a.s.l. Murindo: 23 m a.s.l. Venecia: 1,350 m a.s.l. Envigado: 1,575 m a.s.l. Mutata: 66 m a.s.l. Angostura: 1,637 m a.s.l. Amalfí, Cañón del Porce-Tenche: 1,000 m a.s.l. San Carlos: 1,036 m a.s.l. Caucasia: 50 m a.s.l. San Luis: 1,075 m a.s.l. Fredonia: 1800 m a.s.l. Amagá: 1,392 m a.s.l. Copacabana El Salado rural lane: 1,425 m a.s.l. Caldas: 1789 m a.s.l. Turbo: 2 m a.s.l. Andes: 1357 m a.s.l. Ituango: 1575 m a.s.l. Frontino, "Parque Nacional Natural Las Orquideas, cabaña Venados" 900 m a.s.l. Cisneros: 1,038 m a.s.l. San Jerónimo, Parc. Las Palmeras: 850 m a.s.l. Amalfí, Cañón del Porce-Santa Lucia: 1,020 m a.s.l. Barbosa, Yarumito: 1,308 m a.s.l. Bello: 1,495 m a.s.l. Caracolí: 651 m a.s.l. Cocorná, La Chonta: 1,286 m a.s.l. San Carlos, Urbana: 1,010 m a.s.l. San Juan de Uraba: 25 m a.s.l. Santa Barbara: 1,846 m a.s.l. Yolombó: 1,450 m a.s.l. Yondo: 80 m a.s.l. Urrao: 1,790 m a.s.l. Valparaiso La Fabiana: 800 m a.s.l. Caucasia, La Candelaria rural lane, La Candelaria U de A farm: 80 m a.s.l. Puerto Olaya, 112 m a.s.l. Venecia, J.J. farm: 1,350 m a.s.l. Titiribi: 1,550 m a.s.l. Santo Domingo: 1,000 m a.s.l.

Atta colombica Guérin-Méneville, 1844. Serna (1999) (CAP, MSN, PCM, PO and PN). Tarazá, Puerto Valdivia: 100 m a.s.l. Puerto Nare: 140 m a.s.l. Arboletes, Caña Brava rural lane: 10 m a.s.l. Chigorodo: 12 m a.s.l. La Estrella: 1,764 m a.s.l. Puerto Berrío: 123 m a.s.l. Puerto Triunfo, Rio Claro: 115 m a.s.l. San Roque: 1,100 m a.s.l. San Rafael: 1,000 m a.s.l. Mutata: 66 m a.s.l. Santo Domingo: 1,100 m a.s.l. Turbo: 4 m a.s.l. Amalfí, Cañón del Porce: 950 m a.s.l. Arboletes: 4 m a.s.l. Caucasia 50 m a.s.l. El Bagre, Las Claritas rural lane, Las Claritas farm: 85 m a.s.l. Medellín, Belen district: 1,538 m a.s.l. Necoclí: 8 m

a.s.l. Puerto Berrío, Guasimal rural lane: 112 m a.s.l. San Pedro de Uraba: 8 m a.s.l. Vigia del Fuerte, Guaguando rural lane: 25 m a.s.l. Carepa, Tulenapa farm: 10 m a.s.l. Cisneros: 1,038 m a.s.l. Santafe de Antioquia, Cotove farm: 600 m a.s.l. Yolombó, Porce locality (La Calandria): 1,010 m a.s.l. Caracolí: 651 m a.s.l. Puerto Berrío, Santa Cruz: 112 m a.s.l. San Juan de Uraba: 25 m a.s.l.

Cardiocondyla nuda Mayr, 1866 (PCM, PO, PN). Amalfi, Cañón del Porce-Fosforito: 1,100 m a.s.l. Marinilla: 2,100 m a.s.l.

Cardiocondyla wroughtonii Forel, 1890. Vergara-Navarro *et al.* (2007) (PCM, PN). Medellín, Universidad Nacional: 1,460 m a.s.l.

Cephalotes atratus Linnaeus, 1758. Fernández *et al.* (1996), Serna (1999) (PCM, PO, PA and PN). Cáceres: 100 m a.s.l. Dabeiba: 450 m a.s.l. Mutata: 66 m a.s.l. Arboletes: 4 m a.s.l. Puerto Triunfo, Rio Claro: 150 m a.s.l. San Jerónimo: 750 m a.s.l. San Luis: 1,075 m a.s.l. San Roque: 1,100 m a.s.l. Remedios: 680 m a.s.l. Amalfi, Cañón del Porce: 1,045 m a.s.l. Caucasia: 50 m a.s.l. Puerto Nare, Caño Loco rural lane, La Brasilia farm: 160 m a.s.l. Maceo Cañon, Alicante-Guardasol river: 950 m a.s.l. Támesis, El Hacha rural lane, El Nogal farm: 1,560 m a.s.l. Caucasia: 80 m a.s.l.

Cephalotes basalis Smith, 1876. Sandoval (2005) (PCM and PN). Caldas: 1,789 m a.s.l. Tarazá: 108 m a.s.l. Puerto Triunfo: 115 m a.s.l. Necoclí, El Totumo rural lane: 4 m a.s.l. Caucasia, La Candelaria rural lane, La Candelaria U de A farm: 80 m a.s.l. San Carlos: 1,010 m a.s.l.

Cephalotes christophersenii Forel, 1912. Sandoval (2005) (CAP, PCM, PO and PN). Amalfi, Cañón del Porce-Normandia: 1,045 m a.s.l. Maceo: 950 m a.s.l. Mutata: 66 m a.s.l.

Cephalotes cristatus Emery, 1890. Sandoval (2005) (PCM and PN). Amalfi, Porce (La Calandria): 1,010 m a.s.l. Amalfi, Cañón del Porce-Fosforito: 970 m a.s.l.

Cephalotes femoralis Smith, 1853. Sandoval (2005) (CAP, PCM and PN). Medellín, Universidad Nacional-Núcleo El volador: 1,538 m a.s.l. Caucasia, La Candelaria rural lane, La Candelaria U de A farm: 80 m a.s.l.

Cephalotes maculatus Smith, 1876. Vergara-Navarro *et al.* (2007) (CAP, PCM, PO, PA and PN). Medellín, Universidad Nacional-Núcleo El Volador: 1,493 m a.s.l. Fredonia: 1,800 m a.s.l. Amalfi, "Cañón del Porce-Tenche, Santa Lucia": 1,000 m a.s.l. Fredonia: 1,800 m a.s.l. Santo Domingo Porce: 1,100 m a.s.l. Gómez Plata, La Candelaria rural lane, Vegas de la Clara farm: 1,000 m a.s.l.

Cephalotes minutus Fabricius, 1804. Fernández *et al.* (1996) (PCM, PO and PN). Santafe de Antioquia: 550 m a.s.l. Amalfi, Porce (La Calandria): 1,010 m a.s.l. Santo Domingo Porce: 1,100 m a.s.l. San Jerónimo: 750 m a.s.l. La Pintada: 630 m a.s.l.

Cephalotes pavonii Latreille, 1809. Sandoval (2005) Amalfi (CAP, PCM and PN). Cañón del Porce: 980 m a.s.l.

Cephalotes porrasi Wheeler, 1942. De Andrade and Baroni-Urbani (1999) (PCM, CAP and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Cephalotes pusillus Klug, 1824. Sandoval (2005) (CAP, PCM, PO, PA and PN). San Luis: 1,075 m a.s.l.

Cephalotes targionii Emery, 1894. Sandoval (2005) (CAP, PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Cephalotes umbraculatus Fabricius, 1804. Fernández *et al.* (1996a) (CAP, PCM, PO, PA and PN). Santo Domingo Porce: 1,000 m a.s.l. Sopetrán: 750 m a.s.l. San Carlos: 1,100 m a.s.l. Amalfi, Cañón del Porce-Tenche: 1,000 m a.s.l. Santo Domingo Porce: 1,100 m a.s.l. Caucasia, La Candelaria rural lane, La Candelaria U de A farm: 80 m a.s.l.

Crematogaster abstinens Forel, 1899. Fernández *et al.* (1996) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Crematogaster crinosa Mayr, 1862. Longino (2003) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Crematogaster curvispinosa Mayr, 1862. Longino (2003) (MSN, PCM, PA and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Crematogaster distans Mayr, 1870. Fernández *et al.* (1996a), Longino (2003) (CAP, MSN, PCM, PO and PN). Rionegro: 2,120 m a.s.l. Támesis, San Nicolas rural lane, San Nicolas farm: 1,590 m a.s.l.

Crematogaster limata Smith, 1858. Fernández *et al.* (1996a), Longino (2003) (MSN, PCM, PO and PN) Turbo

Crematogaster montezumia Smith, 1858 (MSN, PCM and PN). Amagá: 1,392 m a.s.l.

Crematogaster nigropilosa Mayr, 1870 (MSN, PCM, PO and PN). Valdivia: 1,102 m a.s.l. Támesis, La Virgen rural lane, La Virgen de la Peña farm: 1,470 m a.s.l.

Cyphomyrmex cornutus Kempf, 1968 (PCM, PN, PO and TIOP). Frontino, Parque Nacional Natural Las Orquideas: 900 m a.s.l.

Cyphomyrmex costatus Mann, 1922. Weber (1940). Note: *C. colombianus* is a junior synonymous of *C. costatus*

- (Bolton *et al.*, 2006) (PCM, CAP and MSN). San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Cyphomyrmex rimosus* Spinola, 1851 (PCM, CAP, PO, PN). Sonson, Llano Cañaveral, La Violeta stream: 1,000 m a.s.l.
- Cyphomyrmex transversus* Emery, 1894. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Cyphomyrmex vorticis* Weber, 1940 (PCM). San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Eurhopalothrix bolau* Mayr, 1870 (PCM, CAP, MSN). Támesis, San Nicolas rural lane, San Nicolas farm: 1,590 m a.s.l.
- Hylomyrma reitteri* Mayr, 1887 (PCM). Frontino: 900 m a.s.l.
- Megalomyrmex foreli* Emery, 1890. Brandão (1990), Fernández *et al.* (1996) (TIOC, PCM, PO and PN). Medellín, Universidad Nacional-Núcleo El volador: 1,538 m a.s.l.
- Megalomyrmex incisus* F. Smith, 1947 (PO, CAP, PCM and MSN). Amalfi, Cañón del Porce: 980 m a.s.l.
- Megalomyrmex leoninus* Forel, 1885 (PCM, PO, PN and PA). Amalfi, Cañón del Porce-Normandia: 1,045 m a.s.l. Amalfi, Cañón del Porce-San Ignacio: 970 m a.s.l.
- Megalomyrmex pacova* Brandao. Amalfi, Cañón del Porce: 980 m a.s.l.
- Megalomyrmex poatan* Brandão, 1990 (MSN and PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Megalomyrmex silvestrii* Wheeler, 1929 (CAP, MSN, PA and PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Megalomyrmex wallacei* Mann, 1916 (PCM and PA). Amalfi, Cañón del Porce: 980 m a.s.l.
- Monomorium floricola* Jerdon, 1851. Fernández *et al.* (1996), Vergara-Navarro *et al.* (2007) (CAP, PCM, PO, PA and PN). Santafe de Antioquia, La Contadora rural lane, Las Flores farm: 550 m a.s.l. Medellín, Universidad Nacional-Núcleo El volador: 1,496 m a.s.l.
- Monomorium pharaonis* Linnaeus, 1758. Fernández *et al.* (1996) (PCM, PO and PN). Arboletes: 10 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Mycocarpurus smithii* Forel, 1893 (PCM, PN and PO). Amalfi, Cañón del Porce-Fosforito: 945 m a.s.l.
- Myrmicocrypta urichi* Weber, 1937. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Nesomyrmex spininodis* Mayr, 1887. Fernández *et al.* (1996). Note: *Leptothorax spininodis* is a junior synonymous of *N. spininodis* (Bolton *et al.*, 2006) (PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l.
- Octostruma balzani* Emery, 1894. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l. (CAP, MSN, PCM, PO and PN). Amalfi, Cañón del Porce-Tenche: 1,000 m a.s.l.
- Octostruma iheringi* Emery, 1888 (MSN, PCM). Támesis, La Virgen rural lane, La Virgen No. 1 farm: 1,540 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Pheidole angulifera* Wilson, 2003. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Pheidole biconstricta* Mayr, 1870 (PCM, PO, PA and PN). Amalfi, Cañón del Porce-San Ignacio: 970 m a.s.l.
- Pheidole bilimeki* Mayr, 1870 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Pheidole browni* Wilson, 2003 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Pheidole colobopsis* Mann, 1916. Wilson (2003) Amalfi (PCM). Cañón del Porce: 980 m a.s.l.
- Pheidole guilelmimuelleri* Forel, 1886. Fernández *et al.* (1996a) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Pheidole quadriceps* Wilson, 2003. Wilson (2003) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Procryptocerus attenuatus* F. Smith, 1876. Amalfi, Cañón del Porce: 980 m a.s.l.
- Procryptocerus coriarius* Mayr, 1870. Longino and Snelling (2002) (PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l. Santa Bárbara, Versalles rural lane: 1,800 m a.s.l.
- Procryptocerus ferreri* Forel, 1912 (MSN, PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Procryptocerus hylaeus* Kempf, 1951 (MSN, PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l.
- Procryptocerus pictipes* Emery, 1896. Longino and Snelling (2002) (PCM and PO). Amalfi, Cañón del Porce: 980 m a.s.l.
- Procryptocerus scabriusculus* Forel, 1899. La Pintada: 980 m a.s.l.
- Procryptocerus schmitti* Forel, 1901. Cañón del Porce: 980 m a.s.l.
- Pyramica grytava* Bolton, 2000. Vergara-Navarro *et al.* (2007) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Pyramica laevipleura Kempf, 1958. Fernández *et al.* (1996). Note: *Strumigenys laevipleura* is a junior synonym of *P. laevipleura* (Bolton *et al.*, 2006) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Pyramica margaritae Forel, 1893. Bolton (2000) (PCM, PO and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Pyramica schulzi Emery, 1894 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Pyramica wheeleri Smith, 1944 (PCM, PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Pyramica xenognatha Kempf, 1958 Fernández *et al.* (1996), Bolton (2000) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Rhopalothrix ciliata Mayr, 1870 (PCM). Támesis, La Virgen rural lane, La Cumbre farm: 1,610 m a.s.l.

Rogeria alzatei Kugler, 1994. Fernández *et al.* (1996a) (CAP, MSN, PCM, PO and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Rogeria foreli Emery, 1894. Vergara-Navarro *et al.* (2007) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Rogeria gibba Kugler, 1994. Fernández *et al.* (1996a) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Solenopsis gayi Spinola, 1851. Fernández *et al.* (1996a) (PCM, PO, PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Solenopsis geminata Fabricius, 1804. Toro (2002), Vergara-Navarro *et al.* (2007) (CAP, PCM, PO, PA and PN). Medellín, Universidad Nacional-Núcleo El volador: 1,593 m a.s.l. Santo Domingo: 1,950 m a.s.l. Caucasia: 80 m a.s.l.

Solenopsis laeviceps Mayr, 1870 (PCM, MSN). Amalfi, Cañón del Porce: 980 m a.s.l.

Solenopsis subterranea Mackay and Vinson, 1989. New record for Colombia (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Stegomyrmex manni Smith, 1946. Serna (2002) (PCM). Amalfi, Cañón del Porce-San Ignacio: 970 m a.s.l.

Strumigenys godmani Forel, 1899 (PCM). San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.

Strumigenys margiventris Santschi, 1931 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Strumigenys perparva Brown, 1958. Vergara-Navarro *et al.* (2007) (PCM, PO and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Trachymyrmex bugnioni Forel, 1912 (MSN and PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Trachymyrmex cornetzi Forel, 1912 (MSN and PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Trachymyrmex zeteki Weber, 1940. Amalfi, Cañón del Porce: 980 m a.s.l.

Tranopelta gilva Mayr, 1866. Vergara-Navarro *et al.* (2007) (PCM, PA and PN). Medellín, Universidad Nacional-Núcleo El Volador: 1,493 m a.s.l. Támesis, El Hacha rural lane, La Miranda farm: 1,510 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.

Wasmannia auropunctata Roger, 1863. Serna (1999), Vergara-Navarro *et al.* (2007) (CAP, MSN and PCM). Medellín: 1,538 m a.s.l. Frontino, Parque Nacional Natural Las Orquideas: 900 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.

PARAPONERINAE

Paraponera clavata Fabricius, 1775. Fernández (1993), Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PN, PA, PO, PCM and PG). Urrao: 1,600 m a.s.l. Urrao: 1,800 m a.s.l. Dabeiba: 450 m a.s.l. Turbo: 2 m a.s.l. Mutata: 66 m a.s.l. Frontino, Parque Nacional Natural Las Orquideas: 1,350 m a.s.l. Santa Barbara: 1,846 m a.s.l.

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Anochetus diegensis Forel, 1912. Fernández (2007), Serna and Vergara-Navarro (2007a) (CAP, PCM, MSN, PO and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Anochetus simoni Emery, 1890. Támesis, San Nicolas rural lane, San Nicolas farm: 1,510 m a.s.l.

Odontomachus affinis Guérin-Méneville, 1844. Serna and Vergara-Navarro (2007a) (PCM). Frontino: 900 m a.s.l.

Odontomachus bauri Emery, 1892. Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (CAP, PCM, PA, PN, MSN, PO and PG). Venecia: 1,300 m a.s.l. Cocorná, La Veta rural lane: 980 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.

Odontomachus chelififer Latreille, 1802. Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (CAP, PCM, PO, PN and MSN). Amalfi, Cañón del Porce: 1,000 m a.s.l. Gómez Plata: 1,828 m a.s.l. La Ceja: 2,149 m a.s.l. Santo Domingo: 1,100 m a.s.l. Medellín: 1,538 m a.s.l. Guarne: 2,150 m a.s.l. Porce: 990 m a.s.l. Campamento: 1,750 m a.s.l. Santa Barbara: 1,846 m a.s.l.

- Odontomachus erythrocephalus* Emery, 1890. Fernández *et al.* (1996), Toro (2002), Vergara-Navarro *et al.* (2007) (CAP, PCM, PA and PN). Donmatías, La Frijolera rural lane: 2,156 m a.s.l. Angostura, Santa Ana rural lane: 1,637 m a.s.l. Ituango: 1,550 m a.s.l. Arboletes: 10 m a.s.l. Medellín: 1,493 m a.s.l. Gómez Plata, La Clara rural lane, Vegas de la Clara farm: 1,080 m a.s.l. Amalfi, Cañón del Porce: 970 m a.s.l. Támesis, Alacena rural lane, Villa Fatima farm: 1,870 m a.s.l. Cocorná: 1,300 m a.s.l. Enviado: 1,575 m a.s.l. Bello Fontidueño: 1,495 m a.s.l. Itagui Ferrara: 1,000 m a.s.l. Guarne: 2,143 m a.s.l. Caldas, Reserve of Alto de San Miguel (lower), La Estrella: 1,764 m a.s.l. Copacabana, El Cabuyal rural lane: 1,650 m a.s.l. Gómez Plata: 1,080 m a.s.l. El Peñol, La Veta, Cocorná 970 m a.s.l. Puerto Nare, Nare river: 1,800 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Odontomachus haematodus* Linnaeus, 1758. Fernández *et al.* (1996), Serna and Vergara-Navarro (2007a) (PCM, PO, PA, PN and PG). Santo Domingo Porce: 1,100 m a.s.l. Cocorná, La Veta rural lane: 970 m a.s.l.
- Odontomachus hastatus* Fabricius, 1804. Serna and Vergara-Navarro (2007a) (PCM, PA and PN). Urrao: 1,800 m a.s.l.
- Odontomachus mormo* Brown, 1976. Serna and Vergara-Navarro (2007a) (PCM and PN). San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Pachycondyla aenescens* Mayr, 1870. Serna and Vergara-Navarro (2007a) (PCM and PN). Sabaneta: 1,610 m a.s.l.
- Pachycondyla apicalis* Latreille, 1802. Fernández *et al.* (1996), Serna and Vergara-Navarro (2007a) (PCM, PO, PA, PN, MSN, CAP and PG) San Pedro: 2,000 m a.s.l. Gómez Plata: 1,828 m a.s.l. Puerto Triunfo, Rio Claro: 150 m a.s.l. Amalfi, Cañón del Porce: 1,100 m a.s.l. Santafe de Antioquia: 550 m a.s.l.
- Pachycondyla arhuaca* Forel, 1901. Serna and Vergara-Navarro (2007a) (CAP, PCM, PA and PG). Amalfi, Cañón del Porce: 980 m a.s.l.
- Pachycondyla atrovirens* Mayr, 1866. Kempf (1972), Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.
- Pachycondyla carbonaria* Smith, 1858. Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PCM, PN and PA). Medellín, Piedras Blancas rural lane: 2,950 m a.s.l. Carepa: 10 m a.s.l.
- Pachycondyla carinulata* Roger, 1861. Mackay *et al.* (2007), Serna and Vergara-Navarro (2007a) (PCM, PA, PO, CAP and PG). Amalfi, Cañón del Porce-Tenche: 1,000 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Pachycondyla constricta* Mayr, 1884. Serna and Vergara-Navarro (2007a) (PCM, PO, PN, PA, CAP and PG) Amalfi, Cañón del Porce-Santa Lucia: 1,020 m a.s.l. Amalfi, Cañón del Porce-Tenche: 1,000 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro” 515 m a.s.l.
- Pachycondyla crassinoda* Latreille, 1802. Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PCM, PO, PA, PN and PG) Santo Domingo Porce: 1,000 m a.s.l.
- Pachycondyla crenata* Roger, 1861. Vergara-Navarro *et al.* (2007), Serna and Vergara-Navarro (2007a) (PCM, PO, PA and CAP) Amalfi, Cañón del Porce-Tenche: 1,000 m a.s.l. Ituango: 1,575 m a.s.l.
- Pachycondyla eleonora* Forel, 1921. Mackay *et al.* (2007), Serna and Vergara-Navarro (2007a) (PCM, PN and PA) Támesis, La virgen rural lane, La Cumbre farm. 1,610 m a.s.l.
- Pachycondyla fauveli* Emery, 1896. Mackay *et al.* (2007) (PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l.
- Pachycondyla ferruginea* Smith, 1858. Mackay *et al.* (2007), Serna and Vergara-Navarro (2007a) (PCM, PA and PN). San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Pachycondyla foetida* Linnaeus, 1758. Mackay *et al.* (2007) (PO, PCM, PA and PN). Amalfi, Cañón del Porce: 980 m a.s.l.
- Pachycondyla harpax* Fabricius, 1804. Mackay *et al.* (2007), Vergara-Navarro *et al.* (2007), Serna and Vergara-Navarro (2007a) (CAP, PCM, PO, PA, PN and PG). Ituango: 1,550 m a.s.l. Donmatías, La Frijolera rural lane: 2,156 m a.s.l. Amalfi, Cañón del Porce: 975 m a.s.l. Gómez Plata: 1,828 m a.s.l. Medellín, El Poblado district: 1,538 m a.s.l. Bello: 1,495 m a.s.l. Santafe de Antioquia: 550 m a.s.l. El Retiro, El Barcino rural lane: 2,109 m a.s.l. Támesis, La Virgen rural lane, La Virgen No. 1 farm: 1,500 m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.
- Pachycondyla holmgreni* Wheeler, 1925. Serna and Vergara-Navarro (2007a) (PCM and PN). Amalfi, Cañón del Porce: 990 m a.s.l.
- Pachycondyla holcotyla* Brown. Frontino: 900 m a.s.l. Caldas: 1789 m a.s.l. Concepción: 1862 m a.s.l.
- Pachycondyla impressa* Roger, 1861. Serna and Vergara-Navarro (2007a) (PCM, PN, PA, MSN, CAP and PO). Angostura, Santa Ana rural lane: 1,637 m a.s.l. Cocorná: 1,300 m a.s.l. Caldas: 1,750 m a.s.l. Fredonia: 1,800 m

a.s.l. San Carlos: 1,036 m a.s.l. Amalfi, Cañón del Porce-Normandia: 1,045 m a.s.l. Envidado, El Salado rural lane: 1,800 m a.s.l.

Pachycondyla obscuricornis Emery, 1890, Amalfi, Cañón del Porce: 970 m a.s.l. Gómez Plata 1,828 m a.s.l. Amalfi, Cañón del Porce: 950 m a.s.l. Cocorná, La Veta rural lane: 980 m a.s.l.

Pachycondyla stigma Fabricius, 1804. Fernández *et al.* (1996), Serna and Vergara-Navarro (2007a) (PCM, PN, PA, PO, CAP and PG). Amalfi, Cañón del Porce: 970 m a.s.l. Puerto Triunfo, Rio Claro: 155 m a.s.l. Cocorná, La Veta rural lane: 980 m a.s.l. Santafe de Antioquia 550 m a.s.l.

Pachycondyla theresiae Forel, 1899. Serna and Vergara-Navarro (2007a) (PCM, PN). Mutata 66 m a.s.l.

Pachycondyla verenae Forel, 1922. Fernández *et al.* (1996), Serna and Vergara-Navarro (2007a) (PCM, PN, PG, PA and PO). Amalfi, Cañón del Porce: 980 m a.s.l.

Pachycondyla villosa Fabricius, 1804. Fernández *et al.* (1996a), Serna and Vergara-Navarro (2007a) (PCM, PN, PA, CAP, PO and PG). Donmatías, La Frijolera rural lane: 2,156 m a.s.l. Cocorná: 1,300 m a.s.l. San Luis: 1,075 m a.s.l. Turbo 2 m a.s.l. Chigorodo: 40 m a.s.l. Mutata 66 m a.s.l. Amalfi, Cañón del Porce: 1,100 m a.s.l.

Platythyrea sinuata Roger, 1860. Fernández *et al.* (1996), Serna and Vergara-Navarro (2007a). (PCM, PN, PA, PO). Amalfi, Cañón del Porce: 1,100 m a.s.l.

Simopelta fernandezii Mackay and Mackay, 2008 (PCM and PA). Amalfi, Cañón del Porce: 980 m a.s.l.

Thaumatomyrmex atrox Weber, 1939 (PCM, PN and CAP). Amalfi, Cañón del Porce: 980 m a.s.l.

Thaumatomyrmex ferox Mann, 1922. Serna and Vergara-Navarro (2007a) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Thaumatomyrmex palludis Weber Amalfi, Cañón del Porce: 1,020 m a.s.l.

PROCERATIINAE

Discothyrea near isthmica Weber, 1940. Vergara-Navarro *et al.* (2007), Serna and Vergara-Navarro (2007a) Medellin:

Probolomyrmex boliviensis Mann, 1923. Sossa-Calvo and Longino (2007), Serna and Vergara-Navarro (2007a). Támesis, La Virgen rural lane, La Cumbre farm: 1,610 m a.s.l.

Proceratium mancum Mann, 1922. Sossa-Calvo and Longino (2007). Amalfi, Cañón del Porce: 980 m a.s.l.

PSEUDOMYRMECINAE

Pseudomyrmex boopis Roger, 1863 (PCM, PN, PA, MSN, PO and CAP). Amalfi, Cañón del Porce-Fosforito: 970 m a.s.l. Amalfi, Cañón del Porce-Normandia: 1,045 m a.s.l. Santafe de Antioquia, Cotove farm: 607 m a.s.l.

Pseudomyrmex cf. colei Enzmann, 1944 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex cubaensis Forel, 1901. Fernández *et al.* (1996a), Vergara-Navarro *et al.* (2007) (PCM, PN, PA, MSN and PO). Medellin, Universidad Nacional-Núcleo El Volador: 1,493 m a.s.l.

Pseudomyrmex curacaensis Forel, 1912 (PCM, PN, PA, MSN, PO and CAP). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex dendroicus Forel, 1904. Fernández *et al.* (1996a), Ward (1999) (PCM, PN, PA, PO). San Jerónimo 780 m a.s.l. Cocorná, La Veta rural lane: 980 m a.s.l. San Jerónimo 750 m a.s.l.

Pseudomyrmex elongatus Mayr, 1870. Vergara-Navarro *et al.* (2007) (PCM, PN, PA and PO). Santafe de Antioquia: 550 m a.s.l. Medellin, Universidad Nacional-Núcleo El Volador: 1,493 m a.s.l.

Pseudomyrmex euryblemma Forel, 1899. Vergara-Navarro *et al.* (2007) (PCM and MSN). Medellin: 1,496 m a.s.l. Universidad Nacional-Núcleo El Volador: 1,493 m a.s.l.

Pseudomyrmex faber Smith, 1858. Aponte (2006) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex filiformis Fabricius, 1804 (PCM, PN, PA, MSN, PO and CAP). Amalfi, Cañón del Porce-Fosforito: 945 m a.s.l.

Pseudomyrmex gebellii Forel, 1899 (PCM, PN and MSN). Anza: 620 m a.s.l. Bolívar: 1,200 m a.s.l. Santo Domingo: 1,100 m a.s.l. Amalfi, Cañón del Porce-La Calandria: 1,010 m a.s.l. Santafe de Antioquia, Cotove farm: 607 m a.s.l. Caucasia 50 m a.s.l. Betulia, Altamira rural lane, La Hondura farm: 1,000 m a.s.l.

Pseudomyrmex gracilis Fabricius, 1804. Vergara-Navarro *et al.* (2007) (PCM, PN, PA, MSN, CAP and PO). Santafe de Antioquia: 600 m a.s.l. Amalfi, Cañón del Porce-Fosforito: 970 m a.s.l. Alejandría: 1,694 m a.s.l. Támesis, La Virgen rural lane, La Virgen No. 1 farm: 1,440 m a.s.l. Medellin, 2,000 m a.s.l. Venecia: 1,335 m a.s.l. Sopetrán: 750 m a.s.l. Tarazá: 100 m a.s.l. Guarne: 2,143 m a.s.l. Santo Domingo, Termales: 1,000 m a.s.l. Marinilla: 2,100

m a.s.l. San Luis “El Refugio, Cañón de Rio Claro”: 515 m a.s.l.

Pseudomyrmex ita Forel, 1906 (PCM and MSN). Santafe de Antioquia, Cotove farm: 607 m a.s.l.

Pseudomyrmex laevivertex Forel, 1906. Vergara-Navarro *et al.* (2007) (PCM and MSN). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex lisus Enzmann, 1944. New record for Colombia (PCM). Amalfi, Cañón del Porce 980 m a.s.l.

Pseudomyrmex mordax Warming, 1894 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex oculatus Smith, 1855 (PCM, PN, PA and PO). Amalfi, Cañón del Porce-La Calandria 1500 m a.s.l.

Pseudomyrmex oki Forel, 1906 (PCM and MSN). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex pallens Mayr, 1870. Vergara-Navarro *et al.* (2007) (PCM, PN, PA and PO). Medellin, Universidad Nacional-Núcleo El volador: 1496 m a.s.l.

Pseudomyrmex rochai Forel, 1912. Vergara-Navarro *et al.* (2007) (PCM and PN). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex sericeus Mayr, 1870 (PCM, PN and PA). Amalfi, Cañón del Porce-San Ignacio: 970 m a.s.l. Amalfi, Cañón del Porce-Fosforito: 945 m a.s.l.

Pseudomyrmex simplex Smith, 1877 (PCM, PN, PA, PO, MSN and CAP). Medellin: 1,496 m a.s.l.

Pseudomyrmex subtilissimus Emery, 1890. Aponte-Cubides (2006) (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex tenuissimus Emery, 1906 (PCM, PN, PA, MSN and PO). Santafe de Antioquia, Cotove farm: 607 m a.s.l.

Pseudomyrmex termitarius Smith, 1855 (PCM, PN, PA, MSN and PO). Amalfi, Cañón del Porce-Fosforito: 970 m a.s.l. Amalfi, Cañón del Porce-La Frijolera: 1,550 m a.s.l.

Pseudomyrmex urbanus Smith, 1877 (PCM). Amalfi, Cañón del Porce: 980 m a.s.l.

Pseudomyrmex viduus Smith, 1858 (PCM, PN, PA and PO). Amalfi, Cañón del Porce: 980 m a.s.l.

These results constitute the first approach to the general knowledge of the ant species-level of Antioquia and contribute to the support of studies involving taxonomy, biodiversity, ecology, conservation, and applied entomology in Colombia and the Neotropics.

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