

**Table S1 Ant species from NPF and NSF.** The table shows for each genus the number of morphospecies we distinguished, and gives the morphospecies IDs we used here. For the morphospecies we identified to species level, species names are given as well as the person who identified them. Genus identification and morphospecies assignment were done by Mickal Houadria based on Bolton (1995).

	Number of morphospecies	Morphospecies IDs used in this study, and identified species	Identifying person
<i>Acanthostichus</i>	1	1	
<i>Acromyrmex</i>	1	1	
<i>Anochetus</i>	1	<i>diegensis</i>	Mickal Houadria
<i>Apterostigma</i>		2, 6, 7	
<i>Atta</i>	1	<i>cephalotes</i>	Mickal Houadria
<i>Azteca</i>	1	2	
<i>Brachymyrmex</i>	1	1	
<i>Camponotus</i>	8	1, 2, 3, 4, 5, 6, 10, 11	
	<i>Camponotus</i> sp. 2	cf. <i>melanoticus</i>	Félix Rosumek
	<i>Camponotus</i> sp. 5	<i>femoratus</i>	Florian Menzel
<i>Carebara</i>	2	1, 2	
<i>Cephalotes</i>	2	1, 3	
<i>Cerapachys</i>	1	2	
<i>Crematogaster</i>	6	1, 2, 3, 4, 5, 7	
	<i>Crematogaster</i> sp. 1	<i>limata</i>	Bonnie Blaimer
	<i>Crematogaster</i> sp. 2	<i>levior</i> complex	Bonnie Blaimer
	<i>Crematogaster</i> sp. 5	<i>flavosensitiva</i>	Bonnie Blaimer
<i>Cyphomyrmex</i>	4	1, 2, 3, 7	
<i>Daceton</i>	1	1	
<i>Dolichoderus</i>	1	1	
<i>Dyscothyrea</i>	1	1	
<i>Eciton</i>	1	1	
<i>Ectatomma</i>	3	1, 4, 6	
	<i>Ectatomma</i> sp. 4	<i>tuberculatum</i>	Florian Menzel
<i>Forelius</i>	1	1	
<i>Gnamptogenys</i>	4	1, 2, 4, 6	
<i>Hylomyrma</i>	1	1	
<i>Hypoponera</i>	7	1, 2, 3, 4, 6, 11, 13	
<i>Labidus</i>	2	1, 2	
<i>Leptanilla</i>	1	1	
<i>Mayaponera</i>	1	3	
<i>Myrmicocrypta</i>	2	1, 2	
<i>Nylanderia</i>	4	1, 2, 5, 6	
<i>Ochetomyrmex</i>	1	1	
<i>Octostruma</i>	2	2, 4	
<i>Odontomachus</i>	3	1, 3, 4	
	<i>Odontomachus</i> sp. 1	<i>haematodus</i>	Mickal Houadria
<i>Pachycondyla</i>	6	1, 2, 3, 4, 9, 10	
	<i>Pachycondyla</i> sp. 1	<i>crassinoda</i>	Mickal Houadria
<i>Parvaponera</i>	1	1	

<i>Pheidole</i>	45	1,2,3,4,5,6, 7,9,10,11,12,14,15,16,1 7,18,19,21,24,27,28,29, 30,31,32,34,35,36,37,38 ,42, 43, 44, 45, 47, 48, 49, 52, 53,54,56,61,62,63,64	
	<i>Pheidole</i> sp. 3	<i>subarmata</i>	John Longino
	<i>Pheidole</i> sp. 5	<i>aripoensis</i>	John Longino
	<i>Pheidole</i> sp. 7	<i>nitella</i>	John Longino
	<i>Pheidole</i> sp. 10	<i>zeteki</i>	John Longino
	<i>Pheidole</i> sp. 11	<i>pugnax</i>	John Longino
	<i>Pheidole</i> sp. 16	cf. <i>texticeps</i>	John Longino
<i>Prionopelta</i>	1	1	
<i>Pseudomyrmex</i>	1	1	
<i>Rhopalotrix</i>	1	1	
<i>Rogeria</i>	1	1, 2	
<i>Sericomyrmex</i>	3	1, 3, 5	
<i>Solenopsis</i>	18	1,2,3,4,5,7,8,9,10,11,12, 13,14,15,16,1-D,2-D,3-D	
<i>Strumigenys</i>	11	1,2,3,4,6,7,8,9,10,11,12	
<i>Tapinoma</i>	1	1	
<i>Thaumatomyrmex</i>	1	1	
<i>Trachymyrmex</i>	4	1, 2, 4, 6	
<i>Wasmannia</i>	1	1	

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**Table S2 Ant species from PPF and PSF.** The table shows for each genus the number of morphospecies we distinguished, and gives the morphospecies IDs we used here. For the morphospecies we identified to species level, species names are given as well as the person who identified them and the key used, if different from the others. Genus identification and morphospecies assignment were done by Mickal Houadria based on Bolton (1995).

	Number of morphospecies	Morphospecies IDs used in this study, and identified species	Identifying person and key
<i>Acropyga</i>	2	1, 2	
<i>Aenictus</i>	2	1, 2	
<i>Aphaenogaster</i>		1, 2, 3, 4	
<i>Camponotus</i>	7	2, 3, 4, 6, 9, 10, 11	
<i>Carebara</i>	9	1-Pheig, 1, 2, 3, 4, 5, 6, 7, 8	
<i>Cataulacus</i>	2	1, 2	
<i>Cerapachys</i>	5	1, 2, 3, 4, 6	
<i>Crematogaster</i>	7	1, 2, 3, 6, 7, 8, 9	
<i>Diacamma</i>	2	1, 2	
<i>Dinomyrmex</i>	1	1	
	<i>Dinomyrmex sp.1</i>	<i>gigas</i>	Mickal Houadria
<i>Dolichoderus</i>	4	1, 2, 3, 4	
<i>Dorylus</i>	1	1	
<i>Dyscothyrea</i>	1	1	
<i>Ectomomyrmex</i>	1	1	
<i>Epelysidris</i>	1	1	
	<i>Epelysidris sp.1</i>	<i>brocha</i>	Florian Menzel; Fayle et al. (2014)
<i>Euponera</i>	1	1	
<i>Euprenolepis</i>	4	1, 2, 4, 7	
<i>Eurhopalothrix</i>	3	1, 2, 3	
<i>Gauromyrmex</i>	1	1	
<i>Gnamptogenys</i>	4	1, 3, 4, 6	
<i>Hypoponera</i>	13	2, 4, 5, 6, 7, 8, 11, 12, 13, 14, 15, 17, 18	
<i>Leptogenys</i>	4	1, 2, 4, 6	
<i>Lophomyrmex</i>	3	1, 2, 4	
	<i>Lophomyrmex sp. 1</i>	<i>bedoti</i>	Florian Menzel; Rigato (1994)
	<i>Lophomyrmex sp. 2</i>	<i>longicornis</i>	Florian Menzel; Rigato (1994)
<i>Mayriella</i>	1	1	
<i>Mesoponera</i>	2	1, 2	
<i>Monomorium</i>	3	1, 2, 3	
<i>Myopias</i>	1	1	
<i>Myrmecina</i>	1	2	
<i>Myrmicaria</i>	2	1, 3	
<i>Myrmoteras</i>	1	1	
<i>Mystrium</i>	1	1	
<i>Nylanderia</i>	3	3, 4, 10	
<i>Odontomachus</i>	2	1, 2	
<i>Odontoponera</i>	2	1, 2	
<i>Parvaponera</i>	1	1	

<i>Pheidole</i>	33	1,2,3,4,5,6,7,8,9,10,11,1 4,15,17,18,19,21,22,24, 25,26,27,28,29,30,31,32 ,33,34,35,37,38,40
<i>Polyrachis</i>	3	1, 2, 3
<i>Ponera</i>	3	1, 3, 5
<i>Proatta</i>	1	1
<i>Proceratium</i>	1	1
<i>Pseudolasius</i>	6	1, 2, 4, 5, 6, 8
<i>Pseudoneoponera</i>	1	1
<i>Recurvidris</i>	5	1, 2, 3, 4, 5
<i>Solenopsis</i>	4	1, 4, 1-D, 2-D
<i>Strumigenys</i>	9	1, 2, 3, 4, 5, 6, 7, 8, 9
<i>Tapinoma</i>	2	1, 3
<i>Technomyrmex</i>	4	1, 2, 5, 6
<i>Tetramorium</i>	17	1,2,3,4,5,6,7,8,9,10,11,1 3,14,15,16,19,20
<i>Tetraoponera</i>	1	1
<i>Vollenhovia</i>	3	1, 3, 4

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