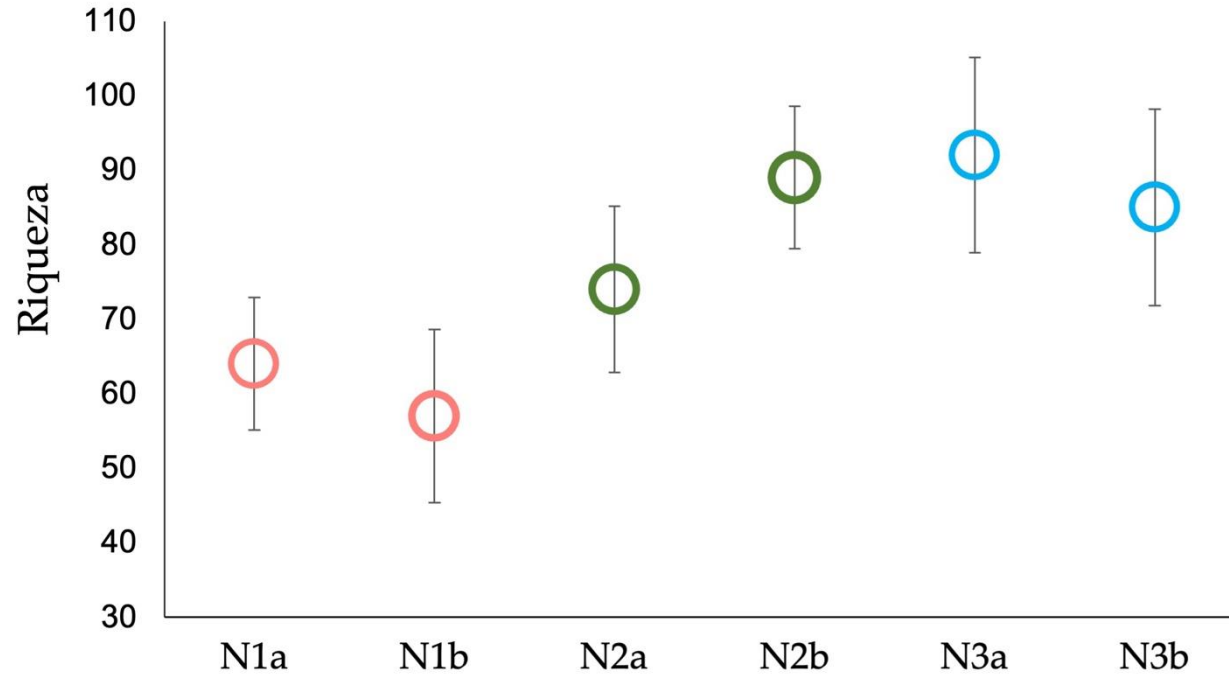


Supplementary Material

Figure S1. Diversity expressed as the effective number of ant species in the six tropical dry forest sampling sites. The bars indicate the confidence intervals (CI) of each of the measurements. N1a: Distrito Regional de Manejo Integrado Luriza; N1b: Distrito Regional de Manejo integrado “Palmar del Titi”; N2a: Santuario de Flora y Fauna Los Colorados; N2b: Parcela Brasilar Bosque Seco Tropical; N3a: Reserva Natural de la Sociedad Civil “CARACOLÍ”; N3b: Reserva Protectora de Coraza y Montes de María.



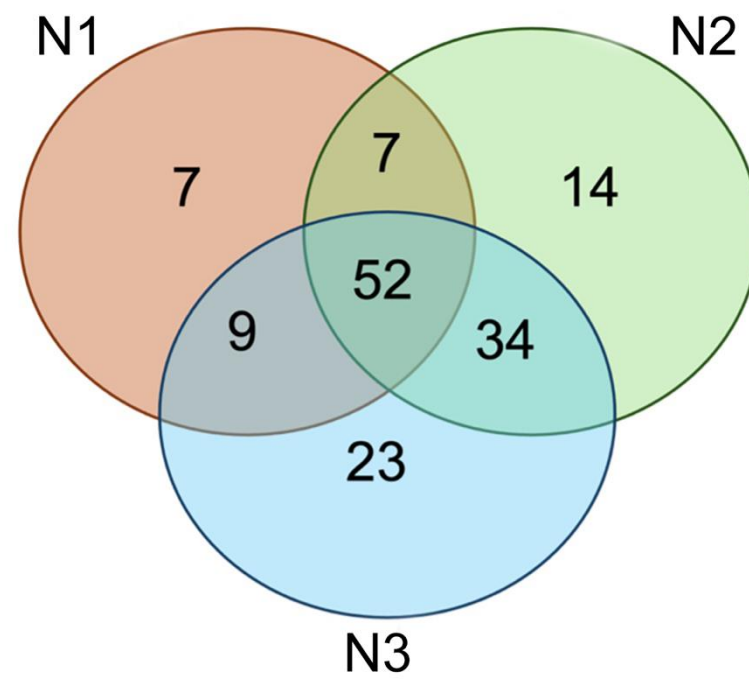


Figure S2. Ant species richness among the TDF fragments studied.

Table S1. Beta diversity and its turnover (below the diagonal) and nestedness (above the diagonal) components between sampling sites. Values close to 1 correspond to a greater difference explained by the turnover or nestedness component between sites. The value of the main diagonal (values in bold) is the species richness at each site. N1a: Distrito Regional de Manejo Integrado Luriza; N1b: Distrito Regional de Manejo integrado “Palmar del Titi”; N2a: Santuario de Flora y Fauna Los Colorados; N2b: Parcela Brasilar Bosque Seco Tropical; N3a: Reserva Natural de la Sociedad Civil "CARACOLÍ"; N3b: Reserva Protectora de Coraza y Montes de María.

TDF Fragments	Sampling site	N1a	N1b	N2a	N2b	N3a	N3b
N1	N1a	65	0.074	0.052	0.102	0.117	0.104
	N1b	0.298	57	0.106	0.163	0.191	0.175
N2	N2a	0.452	0.438	74	0.391	0.082	0.057
	N2b	0.522	0.459	0.085	89	0.015	0.013
N3	N3a	0.505	0.416	0.474	0.411	92	0.027
	N3b	0.47	0.394	0.474	0.491	0.464	86

Table S2. Number of individuals measured (N). means and standard deviation (SD) of the eight traits used.

Species	N	HL		HW		ML		SL		EL		DI		FL		WL	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<i>Acromyrmex santschii</i>	4	1.237	0.356	1.369	0.471	0.945	0.45	1.123	0.482	0.196	0.095	1.28	0.446	1.855	0.748	1.685	0.499
<i>Acropyga fuhrmanni</i>	4	0.453	0.023	0.462	0.014	0.341	0.067	0.331	0.03	0.037	0.006	0.396	0.05	0.366	0.017	0.525	0.007
<i>Acropyga smithii</i>	4	0.348	0.006	0.369	0.006	0.262	0.045	0.201	0.013	0.019	0.012	0.228	0.038	0.194	0.006	0.395	0.015
<i>Adelomyrmex myops</i>	4	0.616	0.033	0.558	0.025	0.348	0.038	0.37	0	0.04	0.006	0.529	0.091	0.431	0.023	0.616	0.033
<i>Alfaria minuta</i>	4	1.008	0.019	0.898	0.083	0.777	0.084	0.69	0.285	0.081	0.008	0.786	0.18	0.897	0.084	1.324	0.126
<i>Anochetus diegensis</i>	8	1.253	0.027	1.079	0.027	0.771	0.041	0.971	0.132	0.16	0.011	0.873	0.095	1.138	0.039	1.628	0.029
<i>Anochetus inermis</i>	4	1.116	0.052	0.976	0.044	0.675	0.026	0.924	0.228	0.198	0.014	0.762	0.064	1.092	0.083	1.572	0.103
<i>Apterostigma dentrigerum</i>	1	1.174	-	0.891	-	0.674	-	1.261	-	0.217	-	0.891	-	2	-	2	-
<i>Apterostigma pilosum</i>	8	0.864	0.042	0.683	0.063	0.532	0.061	0.626	0.16	0.139	0.014	0.665	0.096	1.128	0.056	1.302	0.014
<i>Apterostigma pariense</i>	1	1.174	-	0.87	-	0.674	-	1.152	-	0.217	-	0.804	-	1.957	-	1.913	-
<i>Atta columbica</i>	1	1.5	-	1.535	-	1.371	-	0.613	-	0.248	-	1.412	-	2.1	-	1.707	-
<i>Azteca sp. 1</i>	1	0.78	-	0.743	-	0.489	-	0.2	-	0.157	-	0.613	-	0.527	-	0.89	-
<i>Brachymyrmex aphidicola</i>	4	0.418	0.007	0.374	0.004	0.254	0.033	0.253	0.114	0.093	0.006	0.421	0.089	0.442	0.006	0.439	0.004
<i>Brachymyrmex minutus</i>	4	0.28	0.004	0.324	0.003	0.194	0.059	0.256	0.16	0.082	0.007	0.301	0.088	0.388	0.004	0.345	0.004
<i>Camponotus sp. 1</i>	3	1.112	0.004	1.048	0.007	0.578	0.11	0.851	0.488	0.394	0.004	0.928	0.39	1.287	0.007	1.674	0
<i>Camponotus sp. 3</i>	3	1.117	0.007	1.045	0.016	0.624	0.083	0.715	0.407	0.389	0.028	1.067	0.277	1.302	0.019	1.661	0.05

<i>Camponotus sp. 7</i>	1	1.486	-	1.255	-	1.08	-	0.53	-	0.287	-	2	-	1.524	-	1.813	-
<i>Camponotus striatus</i>	1	0.739	-	0.696	-	0.326	-	0.761	-	0.217	-	0.565	-	0.717	-	0.978	-
<i>Carebara audita</i>	4	0.348	0.001	0.287	0.006	0.199	0.097	0.154	0.028	0.022	0	0.219	0.059	0.176	0.004	0.284	0.002
<i>Carebara brevipilosa</i>	8	0.44	0.026	0.421	0.016	0.277	0.021	0.307	0.014	0.011	0	0.405	0.021	0.326	0.018	0.497	0.019
<i>Carebara globularia</i>	8	0.303	0.005	0.236	0.012	0.185	0.041	0.148	0.007	0.014	0.016	0.072	0.079	0.134	0.014	0.279	0.011
<i>Carebara striata</i>	4	0.348	0	0.304	0	0.145	0.013	0.188	0.013	0.022	0	0.279	0.017	0.17	0.006	0.326	0.022
<i>Carebara urichi</i>	1	0.464	-	0.445	-	0.432	-	0.297	-	0.002	-	0.321	-	0.342	-	0.517	-
<i>Cephalotes atratus</i>	1	2.461	-	3.341	-	3.11	-	0.68	-	0.7	-	0.987	-	3.425	-	3.343	-
<i>Cephalotes columbicus</i>	1	1.313	-	1.455	-	1.455	-	0.178	-	0.36	-	0.53	-	0.78	-	1.135	-
<i>Cephalotes complanatus</i>	1	1.61	-	2.16	-	1.9	-	0.255	-	0.508	-	0.435	-	1.4	-	1.9	-
<i>Cephalotes porrasii</i>	1	1.087	-	1.217	-	0.326	-	0.522	-	0.239	-	0.978	-	0.63	-	1.109	-
<i>Crematogaster brasiliensis</i>	8	0.675	0.004	0.698	0.006	0.542	0.13	0.433	0.161	0.154	0.006	0.661	0.035	1.001	0.012	0.806	0.008
<i>Crematogaster carinata</i>	1	0.671	-	0.665	-	0.586	-	0.326	-	0.15	-	0.645	-	0.778	-	0.775	-
<i>Crematogaster erecta</i>	4	0.541	0.004	0.587	0	0.412	0.152	0.356	0.081	0.13	0.001	0.466	0.079	0.543	0	0.582	0.006
<i>Crematogaster flavosensitiva</i>	4	0.577	0.018	0.523	0.007	0.372	0.094	0.408	0.133	0.156	0.012	0.477	0.038	0.566	0.032	0.594	0.013
<i>Crematogaster limata</i>	12	0.707	0.095	0.708	0.082	0.446	0.12	0.58	0.226	0.168	0.037	0.648	0.072	0.811	0.107	0.83	0.129
<i>Crematogaster nigropilosa</i>	8	0.659	0.037	0.65	0.026	0.489	0.126	0.509	0.162	0.159	0.017	0.667	0.082	0.778	0.012	0.768	0.014

<i>Crematogaster obscurata</i>	4	0.56	0.015	0.538	0.023	0.415	0.077	0.242	0.126	0.144	0.013	0.436	0.053	0.464	0.022	0.554	0.031
<i>Crematogaster stollii</i>	1	0.957	-	1.087	-	0.543	-	0.652	-	0.217	-	1.022	-	0.804	-	1.152	-
<i>Cyphomyrmex costatus</i>	12	0.545	0.034	0.455	0.044	0.395	0.027	0.225	0.045	0.104	0.009	0.322	0.011	0.527	0.085	0.667	0.022
<i>Cyphomyrmex minutus</i>	12	0.605	0.037	0.569	0.032	0.286	0.088	0.416	0.097	0.123	0.011	0.426	0.03	0.593	0.045	0.746	0.032
<i>Cyphomyrmex rimosus</i>	8	0.65	0.032	0.557	0.065	0.372	0.096	0.378	0.143	0.144	0.018	0.544	0.068	0.696	0.046	0.798	0.042
<i>Cyphomyrmex sp. 4</i>	4	0.587	0	0.552	0	0.428	0	0.251	0	0.112	0	0.445	0	0.534	0	0.715	0
<i>Discothyrea humilis</i>	4	0.368	0.003	0.302	0.003	0.195	0.092	0.162	0.048	0.019	0.004	0.227	0.048	0.215	0.003	0.39	0.002
<i>Discothyrea neotropica</i>	4	0.5	0	0.442	0.013	0.188	0.013	0.261	0.022	0.022	0	0.362	0.013	0.297	0.013	0.558	0.013
<i>Discothyrea testacea</i>	4	0.453	0.006	0.41	0.005	0.272	0.077	0.228	0.019	0.019	0.005	0.32	0.086	0.235	0.008	0.453	0.007
<i>Dolichoderus bispinosus</i>	1	1.655	-	1.724	-	0.828	-	1.517	-	0.345	-	1.034	-	1.862	-	2	-
<i>Dolichoderus sp. 2</i>	1	1.78	-	1.859	-	1.107	-	0.36	-	0.439	-	1.317	-	1.699	-	1.566	-
<i>Ectatomma ruidum</i>	8	1.744	0.068	1.622	0.254	1.088	0.191	1.518	0.168	0.45	0.041	1.294	0.29	2.277	0.277	2.776	0.143
<i>Ectatomma tuberculatum</i>	4	2.337	0.01	1.852	0.014	1.753	0.057	2.029	0.349	0.54	0.017	1.993	0.38	3.094	0.014	3.718	0.009
<i>Eurhopalothrix pilulifera</i>	1	0.565	-	0.543	-	0.152	-	0.326	-	0.022	-	0.391	-	0.435	-	0.587	-
<i>Gnamptogenys boliviensis</i>	4	0.688	0.007	0.671	0.004	0.619	0.047	0.541	0.035	0.105	0.005	0.543	0.094	0.54	0.003	1.086	0.001
<i>Gnamptogenys sp. 2</i>	4	0.7	0.006	0.547	0.015	0.542	0.001	0.319	0.027	0.051	0.001	0.359	0.011	0.458	0.037	0.888	0.017
<i>Holcoponera strigata</i>	4	1.121	0.202	1.017	0.269	0.809	0.314	0.717	0.307	0.246	0.102	0.944	0.321	1.265	0.222	1.616	0.348

<i>Hylomyrma columbica</i>	4	0.891	-	0.87	-	0.609	-	0.63	-	0.217	-	0.783	-	0.804	-	1.174	-
<i>Hypoponera opacior</i>	12	0.722	0.046	0.614	0.054	0.419	0.122	0.501	0.135	0.04	0.008	0.559	0.059	0.636	0.091	1.048	0.107
<i>Hypoponera trigona</i>	12	0.638	0.01	0.506	0.007	0.443	0.009	0.268	0.008	0.03	0.005	0.443	0.01	0.662	0.01	0.83	0.006
<i>Labidus coecus</i>	3	0.947	0.089	0.888	0.135	0.675	0.154	0.624	0.061	0.037	0.012	0.752	0.085	1.073	0.125	1.289	0.148
<i>Labidus predator</i>	8	1.439	0.01	1.309	0.008	1.027	0.015	1.044	0.053	0.043	0.007	1.136	0.057	2.072	0.009	2.07	0.01
<i>Lachnomyrmex scrobiculatus</i>	1	0.739	-	0.739	-	0.37	-	0.457	-	0.152	-	0.652	-	0.63	-	0.87	-
<i>Leptogenys ritae</i>	12	0.769	0.027	0.539	0.021	0.411	0.069	0.569	0.111	0.099	0.014	0.536	0.071	0.639	0.035	1.106	0.06
<i>Mayaponera arhuaca</i>	8	1.247	0.084	1.127	0.035	0.898	0.101	0.963	0.065	0.159	0.022	1.004	0.047	1.183	0.035	1.814	0.079
<i>Mayaponera constricta</i>	8	1.55	0.014	1.265	0.075	1.061	0.102	1.436	0.256	0.291	0.008	1.164	0.343	1.838	0.047	2.508	0.075
<i>Megalomyrmex drifti</i>	4	0.567	0.057	0.453	0.041	0.319	0.054	0.334	0.156	0.132	0.02	0.366	0.059	0.463	0.051	0.69	0.118
<i>Megalomyrmex incisus</i>	4	0.696	0	0.598	0.015	0.402	0.015	0.598	0.015	0.196	0	0.5	0.031	0.772	0.046	0.935	0.031
<i>Megalomyrmex longinoi</i>	4	0.582	0.007	0.475	0.005	0.322	0.036	0.55	0.298	0.181	0.005	0.531	0.32	0.738	0.002	0.802	0.004
<i>Megalomyrmex silvestrii</i>	8	0.767	0.022	0.596	0.037	0.423	0.026	0.848	0.262	0.209	0.01	0.571	0.233	1.001	0.024	1.162	0.02
<i>Monomorium floricola</i>	3	0.42	0.048	0.337	0.03	0.232	0.058	0.263	0.101	0.073	0.013	0.312	0.026	0.285	0.059	0.451	0.04
<i>Mycetomoellerius sp. 1</i>	1	0.602	-	0.605	-	0.556	-	0.432	-	0.102	-	0.469	-	0.581	-	0.821	-
<i>Mycocepurus curvispinosus</i>	4	0.645	0.021	0.614	0.01	0.523	0.093	0.47	0.021	0.109	0.007	0.531	0.042	0.562	0.012	0.824	0.012

<i>Myrmicocrypta</i> sp. 2	1	0.761	-	0.63	-	0.413	-	0.63	-	0.065	-	0.587	-	0.696	-	0.913	-
<i>Myrmicocrypta urichi</i>	8	0.693	0.017	0.553	0.013	0.371	0.037	0.517	0.134	0.097	0.011	0.517	0.091	0.722	0.042	0.865	0.031
<i>Neoponera apicalis</i>	3	2.486	0.004	2.139	0.002	1.763	0.432	2.418	0.482	0.828	0	2.105	0.928	3.659	0.006	4.209	0.004
<i>Neoponera carinulata</i>	4	1.499	0.016	1.383	0.006	1.092	0.025	1.293	0.148	0.448	0.03	1.159	0.199	1.638	0.017	2.293	0.016
<i>Neoponera verena</i>	1	2.463	-	2.119	-	1.413	-	2.044	-	0.818	-	2.729	-	3.631	-	4.176	-
<i>Nesomyrmex</i> sp. 1	1	0.866	-	0.778	-	0.685	-	0.228	-	0.187	-	0.434	-	0.67	-	0.907	-
<i>Nomamyrmex esenbeckii</i>	1	1.437	-	1.333	-	1.022	-	0.462	-	0.083	-	0.797	-	1.531	-	2.054	-
<i>Nylanderia guatemalensis</i>	12	0.609	0.028	0.501	0.026	0.311	0.026	0.576	0.26	0.147	0.013	0.381	0.128	0.708	0.043	0.771	0.061
<i>Octostruma amrishi</i>	12	0.525	0.034	0.559	0.045	0.245	0.14	0.248	0.061	0.046	0.008	0.433	0.109	0.381	0.051	0.573	0.08
<i>Octostruma iheringi</i>	4	0.589	0.004	0.653	0.008	0.541	0.008	0.176	0.006	0.065	0.008	0.326	0.006	0.433	0.005	0.739	0.006
<i>Odontomachus bauri</i>	4	2.472	0.029	1.809	0.192	1.395	0.107	1.598	0.723	0.441	0.058	2.225	0.308	2.628	0.148	2.555	0.382
<i>Odontomachus brunneus</i>	4	2.114	0.055	1.612	0.045	1.192	0.004	1.236	0.417	0.289	0.028	1.52	0.199	1.99	0.023	2.073	0.236
<i>Odontomachus laticeps</i>	4	2.446	0.013	1.717	0.008	1.326	0.006	1.262	0.014	0.402	0.007	2.35	0.009	2.544	0.007	2.369	0.004
<i>Odontomachus opaciventris</i>	12	2.767	0.43	2.144	0.274	1.668	0.216	2.399	0.733	0.504	0.084	2.05	0.572	2.965	0.4	3.38	0.412
<i>Pachycondyla harpax</i>	12	1.928	0.101	1.828	0.105	1.412	0.274	1.344	0.225	0.394	0.065	1.501	0.09	1.757	0.167	2.926	0.229
<i>Pachycondyla Impressa</i>	8	2.991	0.055	2.843	0.067	1.981	0.211	2.141	0.342	0.543	0.03	2.245	0.099	2.796	0.083	4.107	0.055
<i>Paratrachymyrmex bugnioni</i>	8	0.777	0.076	0.735	0.075	0.491	0.047	0.56	0.17	0.128	0.011	0.652	0.1	0.911	0.135	1.08	0.125

<i>Paratrachymyrmex cornetzi</i>	4	0.92	0.012	0.942	0.012	0.699	0.105	0.767	0.126	0.142	0.011	0.803	0.02	1.206	0.029	1.38	0.066
<i>Paratrachymyrmex irmgardae</i>	4	0.805	0.158	0.788	0.214	0.685	0.173	0.433	0.262	0.124	0.023	0.672	0.192	0.968	0.355	1.118	0.418
<i>Pheidole biconstricta</i>	4	0.768	0.146	0.681	0.131	0.5	0.078	0.777	0.557	0.166	0.035	0.65	0.082	1.015	0.389	1.01	0.312
<i>Pheidole distorta</i>	1	0.565	-	0.587	-	0.413	-	0.543	-	0.13	-	0.587	-	0.609	-	0.674	-
<i>Pheidole fimbriata</i>	4	0.848	0	0.826	0.001	0.717	0.123	0.775	0.195	0.067	0.003	0.858	0.075	1.045	0.002	1.11	0.002
<i>Pheidole flavens</i>	12	0.439	0.032	0.385	0.022	0.266	0.044	0.315	0.072	0.081	0.008	0.345	0.03	0.335	0.034	0.463	0.027
<i>Pheidole mendicula</i>	12	0.392	0.021	0.384	0.019	0.272	0.069	0.283	0.05	0.079	0.01	0.349	0.025	0.298	0.013	0.419	0.013
<i>Pheidole pugnax</i>	12	0.66	0.024	0.617	0.029	0.463	0.092	0.636	0.179	0.148	0.024	0.598	0.086	0.732	0.203	0.851	0.046
<i>Pheidole sp. 1</i>	12	0.663	0.014	0.634	0.006	0.549	0.009	0.265	0.019	0.108	0.002	0.578	0.008	0.806	0.013	0.786	0.009
<i>Pheidole sp. 12</i>	8	0.482	0.007	0.461	0.005	0.438	0.007	0.329	0.003	0.086	0.007	0.415	0.007	0.436	0.006	0.546	0.006
<i>Pheidole sp. 13</i>	8	0.482	0.007	0.418	0.009	0.395	0.007	0.267	0.008	0.091	0.007	0.396	0.005	0.396	0.006	0.507	0.007
<i>Pheidole sp. 17</i>	3	0.661	0.047	0.594	0.119	0.431	0.074	0.72	0.259	0.11	0.002	0.59	0.254	0.907	0.062	0.935	0.043
<i>Pheidole sp. 18</i>	3	0.478	0.031	0.435	0.031	0.272	0.015	0.522	0.061	0.087	0	0.391	0.031	0.511	0.046	0.576	0.015
<i>Pheidole sp. 2</i>	8	0.803	0.007	0.694	0.008	0.628	0.011	0.431	0.006	0.195	0.01	1.058	0.008	1.106	0.009	1.107	0.002
<i>Pheidole sp. 4</i>	8	0.494	0.021	0.442	0.013	0.307	0.044	0.446	0.107	0.099	0.011	0.436	0.065	0.507	0.044	0.594	0.018
<i>Pheidole sp. 5</i>	8	0.512	0.039	0.472	0.014	0.4	0.065	0.397	0.071	0.085	0.002	0.465	0.045	0.504	0.033	0.612	0.005
<i>Pheidole sp. 9</i>	8	0.55	0.004	0.516	0.005	0.448	0.008	0.336	0.005	0.119	0.006	0.424	0.007	0.47	0.005	0.596	0.006
<i>Pheidole subarmata</i>	12	0.498	0.022	0.458	0.024	0.365	0.069	0.377	0.07	0.113	0.005	0.425	0.03	0.494	0.029	0.621	0.05
<i>Pheidole susannae</i>	4	0.659	0.008	0.517	0.002	0.439	0.005	0.251	0.007	0.134	0.007	0.807	0.014	1.034	0.069	0.795	0.006

<i>Pheidole synarmata</i>	4	0.513	0.041	0.473	0.033	0.354	0.056	0.392	0.042	0.099	0.014	0.425	0.011	0.441	0.021	0.566	0.026
<i>Pheidole transversostriata</i>	4	0.501	0.176	0.426	0.111	0.355	0.124	0.246	0.06	0.068	0.01	0.292	0.062	0.371	0.086	0.465	0.055
<i>Pheidole zeteki</i>	12	0.404	0.025	0.374	0.018	0.222	0.024	0.309	0.036	0.078	0.019	0.335	0.019	0.326	0.031	0.422	0.052
<i>Pogonomyrmex mayri</i>	8	1.985	0.064	1.742	0.034	1.189	0.227	1.535	0.334	0.274	0.003	1.569	0.067	2.363	0.034	2.294	0.034
<i>Prionopelta antillana</i>	1	0.509	-	0.447	-	0.44	-	0.107	-	0.029	-	0.265	-	0.475	-	0.667	-
<i>Probolomyrmex boliviensis</i>	2	0.75	0.046	0.446	0.015	0.228	0.015	0.554	0.015	0	0	0	0	0.641	0.046	1.054	0.077
<i>Proceratium catio</i>	1	0.609	-	0.587	-	0.348	-	0.413	-	0.022	-	0.543	-	0.413	-	0.739	-
<i>Pseudomyrmex boopis</i>	1	1.217	-	1	-	0.587	-	0.609	-	0.804	-	0.696	-	1.13	-	1.652	-
<i>Pseudomyrmex mordax</i>	1	0.989	-	0.913	-	0.467	-	0.391	-	0.413	-	0.674	-	0.761	-	1.37	-
<i>Pseudomyrmex simplex</i>	4	1.223	0.007	1.004	0.01	0.701	0.011	0.591	0.006	0.809	0.008	0.612	0.011	1.137	0.01	1.659	0.012
<i>Pseudomyrmex sp. 4</i>	1	1.976	-	1.62	-	0.93	-	0.41	-	1.198	-	0.92	-	1.852	-	2.756	-
<i>Rasopone pluviselva</i>	1	1.261	-	1.152	-	0.761	-	0.891	-	0.152	-	0.978	-	0.87	-	1.739	-
<i>Rhopalothrix isthmica</i>	1	0.566	-	0.551	-	0.393	-	0.157	-	0.026	-	0.328	-	0.445	-	0.593	-
<i>Rogeria belti</i>	8	0.607	0.11	0.521	0.103	0.421	0.144	0.275	0.086	0.078	0.011	0.406	0.072	0.446	0.085	0.588	0.081
<i>Rogeria ciliosa</i>	1	0.63	-	0.543	-	0.348	-	0.478	-	0.065	-	0.5	-	0.5	-	0.717	-
<i>Rogeria curvipubens</i>	12	0.528	0.022	0.449	0.015	0.319	0.093	0.316	0.044	0.058	0.009	0.384	0.031	0.359	0.027	0.542	0.02
<i>Rogeria foreli</i>	8	0.628	0.032	0.542	0.044	0.349	0.043	0.401	0.068	0.073	0.013	0.483	0.055	0.501	0.002	0.676	0.047
<i>Sericomyrmex amabilis</i>	4	1.087	0.061	1.261	0.061	0.707	0.015	0.815	0.015	0.185	0.015	1.033	0.015	1.196	0.154	1.565	0.031

<i>Solenopsis azteca</i>	12	0.34	0.043	0.281	0.024	0.19	0.04	0.245	0.07	0.03	0.012	0.275	0.054	0.217	0.022	0.357	0.031
<i>Solenopsis geminata</i>	12	0.557	0.011	0.551	0.012	0.498	0.004	0.17	0.004	0.101	0.005	0.519	0.007	0.587	0.014	0.635	0.031
<i>Solenopsis picea</i>	12	0.474	0.011	0.406	0.029	0.394	0.025	0.099	0.002	0.045	0.004	0.254	0.024	0.351	0.006	0.457	0.013
<i>Stegomyrmex manni</i>	2	1.339	0.289	1.237	0.25	0.859	0.108	0.753	0.257	0.107	0.002	0.918	0.177	1.17	0.067	1.716	0.125
<i>Strumigenys biolleyi</i>	1	0.674	-	0.543	-	0.391	-	0.413	-	0.087	-	0.326	-	0.522	-	0.696	-
<i>Strumigenys cordovens</i>	4	0.826	0.022	0.638	0.013	4.543	6.269	0.688	0.033	0.072	0.013	0.377	0.013	0.775	0.025	0.841	0.025
<i>Strumigenys deltisquama</i>	12	0.634	0.098	0.625	0.14	0.357	0.033	0.312	0.023	0.059	0.009	0.337	0.118	0.419	0.047	0.638	0.111
<i>Strumigenys denticulata</i>	4	0.465	0.007	0.354	0.006	1.597	1.063	0.343	0.052	0.189	0.145	0.262	0.039	0.308	0.003	0.482	0.003
<i>Strumigenys dyseides</i>	4	0.391	0	0.326	0	0.227	0.014	0.238	0.032	0.025	0.004	0.246	0.01	0.285	0.003	0.432	0.003
<i>Strumigenys eggersi</i>	12	0.442	0.011	0.362	0.009	0.266	0.035	0.248	0.032	0.044	0.002	0.21	0.009	0.269	0.017	0.451	0.016
<i>Strumigenys elongata</i>	12	0.587	0.014	0.446	0.012	0.319	0.011	0.377	0.011	0.043	0	0.268	0.011	0.428	0.011	0.554	0.012
<i>Strumigenys fridericimuelleri</i>	12	0.47	0.011	0.34	0.011	0.151	0.034	0.192	0.033	0.043	0.001	0.188	0.026	0.274	0.038	0.462	0.045
<i>Strumigenys lanuginosa</i>	12	0.62	0.038	0.484	0.021	0.375	0.011	0.342	0.011	0.06	0.011	0.288	0.011	0.473	0.033	0.674	0.031
<i>Strumigenys marginiventris</i>	8	0.742	0.03	0.555	0.109	0.505	0.1	0.554	0.034	0.083	0.01	0.384	0.082	0.548	0.035	0.732	0.019
<i>Strumigenys subdentata</i>	4	0.494	0.024	0.421	0.012	0.293	0.011	0.273	0.011	0.051	0.012	0.267	0.013	0.362	0.026	0.523	0.037
<i>Strumigenys zeteki</i>	8	0.488	0.022	0.352	0.012	0.211	0.03	0.194	0.016	0.041	0.004	0.162	0.026	0.314	0.021	0.547	0.049
<i>Syscia sp. 1</i>	3	0.686	0.027	0.557	0.026	0.203	0.176	0.366	0.102	0	0	0.105	0.182	0.35	0.303	0.884	0.067

<i>Tapinoma</i> <i>ramulorum</i>	1	0.488	-	0.411	-	0.273	-	0.121	-	0.089	-	0.427	-	0.435	-	0.488	-
<i>Thaumatomyrmex</i> <i>atrox</i>	4	0.687	0.004	0.712	0.006	0.631	0.006	0.672	0.006	0.227	0.006	0.578	0.001	0.713	0.005	1.145	0.006
<i>Thaumatomyrmex</i> <i>zeteki</i>	8	0.67	0.045	0.681	0.034	0.644	0.024	0.567	0.067	0.2	0.02	0.577	0.028	0.687	0.024	1.121	0.023
<i>Trichomyrmex</i> <i>destructor</i>	8	0.685	0.003	0.603	0.003	0.525	0.003	0.167	0.004	0.09	0.003	0.502	0.004	0.53	0.004	0.674	0.004
<i>Wasmannia</i> <i>auropunctata</i>	12	0.458	0.014	0.409	0.021	0.236	0.057	0.345	0.072	0.094	0.005	0.355	0.009	0.358	0.096	0.476	0.015

Table S3. Summary of the interpolation and extrapolation analysis for the calculation of sampling coverage and estimation of q-order diversity in the TDF fragments in the studied departments. SR: Species richness; LCI: lower confidence interval; UCI: upper confidence interval; CI: 95% confidence intervals; Chao-1: Number of species expected with the estimator proposed by Chao1; \hat{C}_m = estimated sampling coverage for the TDF.

TDF fragments	Season	SR	LCI	UCI	Chao-1	\hat{C}_m
N1	Rainy	57	45.95	68.05	75	0.96
	Dry	59	47.96	70.04	77	0.94
N2	Rainy	80	69.44	90.55	91	0.96
	Dry	85	75.83	94.17	108	0.92
N3	Rainy	103	87.63	118.37	144	0.95
	Dry	73	61.37	84.63	94	0.94

Table S4. Permutation-based multivariate analysis of variance (PERMANOVA) between the temporal and spatial factors in the TDF fragments (N= 999). df: Degrees of freedom. The asterisk indicates statistical differences.

Factor	Pseudo-F	df(residual)	<i>p</i>
Temporal diferencie (Climate period)	2.183	1(6)	0.0267*
Spatial difference (TDF Fragments)	2.467	2(6)	0.003**
Difference (Climate period/ TDF Fragments)	0.885	2(6)	0.594

Table S5. Pairwise Adonis test using the Bray-Curtis distance for comparisons between departments. df: Degrees of freedom

TDF fragment pairs	Pseudo-F	df(residual)	<i>p</i>
N1 vs N2	1.65	1(6)	0.167
N1 vs N3	3.30	1(6)	0.034
N2 vs N3	1.84	1(6)	0.029

Table S6. Percentage contribution of each component to beta diversity for the TDF fragment pairs evaluated in each climatic season.

Climatic season	TDF fragment pairs	% Total Beta (β_{jac})	% Species turnover (β_{jtu})	% Nestedness (β_{jne})
Rainy	N1-N2	56	74	25
	N1-N3	60	54	46
	N2-N3	50	77	23
Dry	N1-N2	59	76	24
	N1-N3	60	88	12
	N2-N3	58	91	9

Table S7. Community Weighted Mean (CWM) *p*-values for eight functional traits of ant communities across TDF fragments evaluated by Tukey post-hoc analysis at a significance level of 0.05 Abbreviations as in Table 1.

TDF fragment pairs	HL	HW	ID	ML	EL	SL	FL	WL
N1-N2	0.571	0.061	0.999	0.987	0.884	0.109	0.993	0.578
N1-N3	0.975	0.781	0.859	0.061	0.321	0.925	0.929	0.487
N2-N3	0.079	0.173	0.851	0.047	0.166	0.061	0.965	0.121

Table S8. *p*-values of the estimated functional diversity indices for ant communities among the TDF fragments evaluated by Tukey post-hoc analysis with a significance level of 0.05. Functional richness (FRic), functional evenness (FEve), functional redundancy (Fred) and Rao's quadratic entropy (QRao) were estimated.

TDF fragment pairs	Fric	Feve	Fred	QRao
N1-N2	0.9085	0.5422	0.6467	0.7135
N1-N3	0.0100	0.5655	0.0106	0.0064
N2-N3	0.0189	0.9991	0.0430	0.0213