

Forest gaps, edge, and interior support different ant communities in a tropical peat-swamp forest in Borneo

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Electronic Supplementary Material

Table S1. Environmental variables per plot (mean \pm standard deviation for all except basal area as it comprises 1 record per plot). Canopy cover was estimated directly above each trap for three layers (10 m, 20 m and > 20 m). Relative ground cover of living plants, dead wood and bare ground are mean values of categorical variables scored in four classes, for the 1 m diameter area around each trap: 1 = 0-25%, 2 = 25-50%, 3 = 50-75% and 4 = 75-100%. Basal circumference (used to calculate total basal area) and diameter at breast height were recorded for each tree with diameter at breast height larger than 6 cm.

Table S2. Ant genera recorded and worker abundance across all traps per plot and in total. Note that sampling in the forest edge and interior forest constituted 30 trapping units/month, whereas sampling in the bat gaps constituted 15 trapping units/month (see Methods for details). * *Ochetellus* includes a lumping error of one *Camponotus* morphospecies.

Table S3. Percentage variance explained for the four PCA axes of each PCA plot in Figure 3 and Figure S1.

Figure S1. PCA of plots separated for dry (-d) and wet season (-w) for ant community composition, A: 1st PCA axis versus 2nd PCA axis, B: 1st PCA axis versus 3rd PCA axis. Percentage of explained variance for each PCA axis is in parentheses. Different colours and symbols represent the disturbance categories: bat gaps (black circles), edge (purple squares) and interior forest (green diamonds). Percentage explained variance for all four PCA axes is in Table S3.

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Variable	Bat gaps		Edge	Interior	
	G	H	E	A	B
Canopy cover at 10 m height (%)	0	0	47.3 \pm 23.3	58.8 \pm 22.7	56.1 \pm 29.1
Canopy cover at 20 m height (%)	0	0	32.8 \pm 30.1	50.7 \pm 25.7	49.0 \pm 29.6
Canopy cover >20 m height (%)	0	0	0	10.0 \pm 23.1	14.0 \pm 24.1
Living plants cover	2.5 \pm 1.0	1.7 \pm 0.8	1.1 \pm 0.3	1.5 \pm 0.7	1.6 \pm 0.7
Dead wood cover	2.2 \pm 0.7	1.9 \pm 0.7	4 \pm 0	1.4 \pm 0.6	1.2 \pm 0.4
Bare ground cover	1.1 \pm 0.5	2.5 \pm 0.9	1 \pm 0	2.5 \pm 0.7	2.1 \pm 0.6
Diameter at breast height (cm)	0	0	10.6 \pm 4.9	13.7 \pm 7.1	13.4 \pm 6.5
Basal area (m ²)	0	0	6.0	7.1	7.7

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	Condition / plot					Total
	Bat gap		Edge	Interior		
Genus	G	H	E	A	B	
Dolichoderinae						
<i>Ochetellus</i> *	2	15	2	2	2	23
<i>Philidris</i>				11	1	12
<i>Tapinoma</i>	3	1	12	8	4	28
<i>Technomyrmex</i>	1	1	6	18	2	28
Ectatomminae						
<i>Gnamptogenys</i>			5	1	1	7
Formicinae						
<i>Camponotus</i>	11	12	16	30	37	106
<i>Dinomyrmex</i>	1		6	16	8	31
<i>Euprenolepis</i>	2		1	77	105	185
<i>Nylanderia</i>	35	32	153	154	236	610
<i>Oecophylla</i>	16	3				19
<i>Polyrhachis</i>			34	2	2	38
Myrmicinae						
<i>Cardiocondyla</i>	1	1		1		3
<i>Carebara</i>				4	10	14
<i>Crematogaster</i>	10	6	67	33	39	155
<i>Mayriella</i>				1		1
<i>Meranoplus</i>				1		1
<i>Monomorium</i>	195	160	16	29	10	410
<i>Pheidole</i>	127	70	55	381	366	999
<i>Rhopalomastix</i>			1			1
<i>Solenopsis</i>			2			2
<i>Strumigenys</i>					2	2
<i>Tetramorium</i>	7	5	69	33	99	213
<i>Vollenhovia</i>				13		13
Ponerinae						
<i>Leptogenys</i>		2	10			12
Pseudomyrmecinae						
<i>Tetraponera</i>					4	4
Formicidae indet. (damaged)	13	21	26	40	34	133

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Figure	Spatial scale	PCA1	PCA2	PCA3	PCA4
Figure 3A	trap	22.7	21.0	11.0	8.3
Figure 3B	plot	74.0	16.3	6.6	3.1
Figure S1	plot	66.4	13.9	8.7	5.5

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