

# Microclimate and Vegetation Structure Significantly Affect Butterfly Assemblages in a Tropical Dry Forest

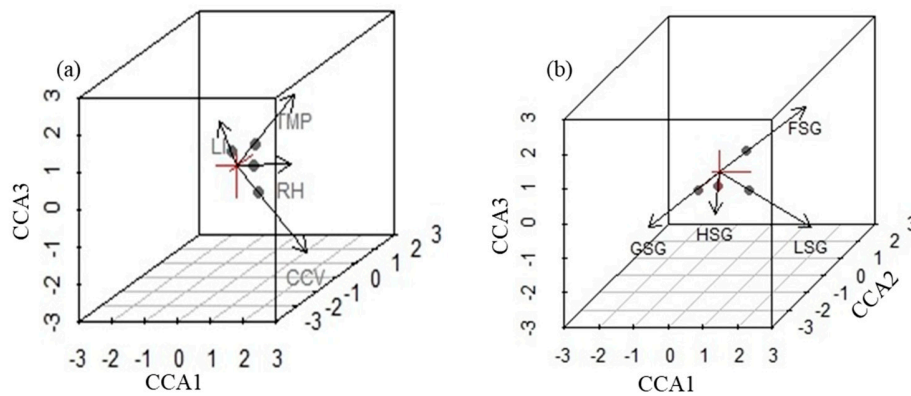
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**Figure S1.** Three-dimensional ordination diagram between butterfly richness and (a) microclimatic variables and (b) disturbance parameters, derived using canonical correspondence analysis.

Abbreviations: light intensity (LI), relative humidity (RH), canopy cover (CCV) and temperature (TMP), fire signs (FSG), logging signs (LSG) and grazing signs (GSG).

**Table S1** Grid locations, habitat types and description statistics of their associated parameters: elevation (ELV), canopy cover (CC), temperature (TMP), relative humidity (RH), light intensity (LI), wind speed (WS), human signs (HS), Grazing signs (GS), logging signs (LS), fire signs (FS)

Grid No	GPS Location	Habitat	ELV (m)	CC (%)	TMP (°C)	RH (%)	LI (x100 lux)	WS (m/s)	HS	GS	LS	FS	Species richness	Species abundance
1	19.10813 N 82.48029 E	Open forest	596.75 ± 3.75	28.19 ± 6.65	34.725 ± 1.16	54.1 ± 3.98	936 ± 5	1.04 ± 0.41	0	0.25 ± 0.25	0.5 ± 0.5	0	12	44
2	19.12192 N 82.37001 E	Open forest	590.33 ± 1.56	33.65 ± 6.76	39.58 ± 0.54	36.282 ± 1.45	982 ± 187	0.64 ± 0.29	0	0	2.4 ± 1.29	0	9	57
3	18.83887 N 82.61657 E	Dense forest	816.2 ± 5.71	40.102 ± 3.57	33.18 ± 0.84	52.22 ± 2.53	261.6 ± 101.57	0.842 ± 0.25	0	0	0.8 ± 0.8	0.8 ± 0.8	21	61
4	18.79784 N 82.58238 E	Open forest	779.6 ± 4.24	8.948 ± 4.76	39.48 ± 1.01	36.54 ± 1.61	818.8 ± 26.97	1.1 ± 0.45	0	0	0	0	10	35
5	18.89708 N 82.66951 E	Open forest	748.5± 5.5	19.81 ± 5.54	28.05 ± 0.05	51.1 ± 0.4	72 ± 1.52	0.905 ± 0.45	0	0	0	0	4	7
6	18.94711 N 82.644 E	Open forest	678.2 ± 9.57	20.25 ± 6.43	33.96 ± 0.82	51.08 ± 3.37	725.8 ± 88.10	1.05 ± 0.49	0.2 ± 0.2	0	1.4 ± 0.98	0.4 ± 0.4	7	15
7	18.86915 N 83.16004 E	Open forest	358 ± 0	11.48 ± 1.15	33.2 ± 0.1	64 ± 2	173 ± 73	0	5 ± 1	2 ± 1	0	0	8	111
8	18.91092 N 83.15811 E	Riparian forest	375 ± 3.03	40.32 ± 20.48	33.13 ± 0.47	59.80 ± 2.40	339 ± 83	0.07 ± 0.07	0	0	0	0	16	144
9	18.7479 N 82.52603 E	Dense forest	751.4 ± 39.77	39.75 ± 6.16	33.07 ± 0.52	60.08 ± 1.85	626 ± 70.10	0.81 ± 0.21	0	0	1.4 ± 0.98	0.8 ± 0.8	6	21
10	18.71032 N 82.56892 E	Dense forest	907.5 ± 1.19	47.79 ± 6.43	34.6 ± 0.17	50.83 ± 0.92	544.25 ± 109	1.07 ± 0.28	0	0	0.5 ± 0.29	0	9	39
11	18.70752 N 82.57062 E	Open forest	619.2 ± 1.06	27.96 ± 3	36.76 ± 0.4	48.88 ± 1.28	695.6 ± 37.06	0.65 ± 0.31	0	0	1.2 ± 0.58	2.8 ± 1.5	9	20
12	18.91928 N 82.27573 E	Open forest	529.2 ± 6.24	29.49 ± 6.34	40.96 ± 0.78	27.70 ± 1.39	896.2 ± 10.44	0.47 ± 0.24	0	0	1.8 ± 0.8	0.2 ± 0.2	9	18

13	19.01481 N 83.15844 E	Dense forest	858 ± 1	36.47 ± 7.92	33.57 ± 0.23	52.37 ± 3.68	601 ± 60.52	0.09 ± 0.09	0	0	0.33 ± 0.33	0	18	83
14	18.98735 N 83.14435 E	Open forest	762.2 ± 6.42	13.28 ± 7.8	37.38 ± 0.63	41.78 ± 1.16	697 ± 56.44	0.17 ± 0.11	1.6 ± 0.98	0	0	0	24	113
15	18.99159 N 83.07821 E	Dense forest	1026.75 ± 15.67	39.37 ± 4.75	34.73 ± 0.64	44.85 ± 1.72	356.5 ± 106.9	0.27 ± 0.22	0	0	0.5 ± 0.5	0	15	22
16	18.35035 N 82.72384 E	Dense forest	917 ± 9.70	35.37 ± 3	37.14 ± 0.44	43.92 ± 1.22	653.8 ± 38.08	0.36 ± 0.19	0	0	2.4 ± 1.29	0	16	131
17	18.24864 N 82.62625 E	Open forest	928.6 ± 16.37	24.12 ± 11.49	34.44 ± 1.44	42.4 ± 6.78	38 ± 1.87	0.12 ± 0.12	0	0	0.4 ± 0.4	0.6 ± 0.6	13	29
18	19.11242 N 82.7441 E	Open forest	610.2 ± 2.42	34.96 ± 2.77	33.02 ± 0.09	59.26 ± 1.20	442.4 ± 17.76	0.90 ± 0.19	0	0	0.6 ± 0.4	0	14	29
19	19.10444 N 82.75983 E	Open forest	639 ± 2.54	27.35 ± 4.41	35.15 ± 0.17	55.93 ± 0.73	560.25 ± 9.29	0.25 ± 0.25	0.25 ± 0.25	0	4 ± 1.35	0	7	21
20	19.11848 N 82.67794 E	Open forest	587.8 ± 1.71	74.03 ± 3.13	37.82 ± 0.3	50.24 ± 0.8	643.4 ± 34.26	0.31 ± 0.16	0.8 ± 0.8	0	8.4 ± 4	0	12	36
21	19.03167 N 82.70724 E	Open forest	589.2 ± 6.4	16.42 ± 8.43	34.88 ± 0.07	57.58 ± 0.79	209.8 ± 7.7	1.33 ± 0.16	0.4 ± 0.4	1.2 ± 1.2	0.6 ± 0.4	0.2 ± 0.2	12	24
22	19.03606 N 82.70812 E	Open forest	836 ± 11.43	26.28 ± 4.04	33.76 ± 0.33	44.14 ± 1.06	591.6 ± 32.81	3.96 ± 3.36	0	1.6 ± 0.98	1.2 ± 0.73	0.2 ± 0.2	17	55
23	18.52395 N 82.45019 E	Dense forest	779.8 ± 9.99	38.91 ± 2.86	31.7 ± 0.34	63.18 ± 1.89	358.2 ± 61.40	0.92 ± 0.11	0	0	6.2 ± 2.48	2.6 ± 1.54	7	17
24	18.62047 N 82.46129 E	Open forest	788.6 ± 15.40	25.34 ± 8.62	36.06 ± 0.72	53.36 ± 2.71	691.4 ± 62.16	0.33 ± 0.12	0	0	1.4 ± 0.75	1.2 ± 1.2	13	51
25	18.73577 N 82.42192 E	Open forest	639.4 ± 9.43	32.35 ± 5.63	34.08 ± 0.05	57.24 ± 1.45	60.2 ± 10.54	0.08 ± 0.05	0.4 ± 0.4	4 ± 4	1.6 ± 0.6	0	7	15
26	18.66267 N 82.34207 E	Riparian forest	477.4 ± 11.06	30.76 ± 19.76	34.14 ± 1.11	64.64 ± 4.49	556.6 ± 135.75	0.85 ± 0.79	0	0.8 ± 1.79	1.4 ± 2.07	0.4 ± 0.55	21	65

27	18.69131 N 82.37717 E	Open forest	610 ± 0.58	30.86 ± 3.04	36.22 ± 0.22	56.68 ± 0.65	460.8 ± 89.26	0.67 ± 0.21	0	0	4.6 ± 1.33	0.4 ± 0.4	12	19
28	18.7657 N 82.34219 E	Dense forest	643.8 ± 1.39	42.46 ± 4.28	35.53 ± 0.27	58.23 ± 1.3	232.4 ± 67.09	0.36 ± 0.14	0	0	1.2 ± 0.8	0	9	13
29	18.49982 N 83.01994 E	Open forest	871.2 ± 11.11	16.48 ± 6.86	32.66 ± 0.43	68.42 ± 2.02	262.2 ± 38.05	0.73 ± 0.66	0	0.8 ± 0.8	0.4 ± 0.25	0	17	53
30	18.46912 N 83.0109 E	Open forest	764.2 ± 7.93	29.79 ± 3.64	33.5 ± 0.2	58.62 ± 1.49	135.8 ± 13.85	0.29 ± 0.18	0.2 ± 0.2	0	1.8 ± 0.92	0	23	72
31	18.81511 N 82.16915 E	Riparian forest	381.12 ± 0.1	45.42 ± 10.64	34.54 ± 0.53	56.86 ± 2.13	226.2 ± 128.72	0.06 ± 0.03	0	0	0	0	23	68
32	18.9017 N 82.60196 E	Riparian forest	681.83 ± 5.53	27.33 ± 8.26	34.76 ± 0.57	50.62 ± 1.65	381.8 ± 138.94	0.35 ± 0.15	0	0	0	0	14	49
33	18.55094 N 82.75653 E	Riparian forest	955.93 ± 16.83	18.92 ± 8.50	32.94 ± 0.32	41.66 ± 0.93	814.4 ± 78.45	0.17 ± 0.08	0	0	0	0	16	35
34	18.82966 N 82.16823 E	Riparian forest	470 ± 0.46	28.93 ± 7.38	28.36 ±	64.2 ± 0.21	211.8 ± 122.26	0.35 ± 0.16	0	0	0	0.2 ± 0.2	9	39
35	18.64676 N 83.00731 E	Riparian forest	1273.65 ± 13.81	40.90 ± 4.73	26.93 ± 0.92	43.53 ± 4.03	282 ± 59.18	0.41 ± 0.18	0	0	1.25 ± 0.63	0	6	6

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