

Model	Abundance				Diversity			
	LLH	AIC	Δ_i	ω_i	LLH	AIC _c	Δ_i	ω_i
1 : CP=NC=CM=IC	-15.1	32.1	0	0.1410	-79.9	175.9	42.5	$5.9 \cdot 10^{-10}$
2 : CP=NC=CM vs IC	-14.9	33.8	1.67	0.0610	-64.3	161.4	28	$8.3 \cdot 10^{-7}$
3 : CP=NC=IC vs CM	-14.7	33.4	1.34	0.0722	-61.0	154.7	21.3	$2.4 \cdot 10^{-5}$
4 : CP=CM=IC vs NC	-14.6	33.1	1	0.0853	-62.1	157	23.6	$7.6 \cdot 10^{-6}$
5 : NC=CM=IC vs CP	-14.4	32.8	0.69	0.0997	-76.0	184.8	51.4	$7.1 \cdot 10^{-12}$
6 : CP=NC vs CM=IC	-15.0	34.0	1.93	0.0537	-68.3	169.4	36	$1.5 \cdot 10^{-8}$
7 : CP=CM vs NC=IC	-14.1	32.2	0.06	0.1370	-66.8	166.3	32.9	$7.3 \cdot 10^{-8}$
8 : CP=IC vs NC=CM	-15.1	34.1	2	0.0520	-57.3	147.3	13.8	$9.9 \cdot 10^{-4}$
9 : CP=NC vs CM vs IC	-14.7	35.4	3.31	0.0269	-50.8	151.2	17.8	$1.4 \cdot 10^{-4}$
10 : CP=CM vs NC vs IC	-14.0	34.0	1.92	0.0540	-48.9	147.5	14	$9.1 \cdot 10^{-4}$
11 : CP=IC vs NC vs CM	-14.5	34.9	2.81	0.0346	-41.9	133.4	0	0.9975
12 : NC=CM vs CP vs IC	-14.3	34.7	2.57	0.0390	-56.5	162.6	29.2	$4.7 \cdot 10^{-7}$
13 : NC=IC vs CP vs CM	-13.8	33.6	1.52	0.0658	-59.0	167.6	34.2	$3.8 \cdot 10^{-8}$
14 : CM=IC vs CP vs NC	-14.1	34.1	2	0.0518	-58.6	167	33.5	$5.2 \cdot 10^{-8}$
15 : CP vs NC vs CM vs IC	-13.7	35.5	3.38	0.0260	-41.1	149.2	15.7	$3.9 \cdot 10^{-4}$

Table A : Model selection approach applied to spatial variations in triatomines' overall abundance and diversity.

S2 Table (Péneau et al.)

Model	LLH	AICc	Δ_i	ω_i
<i>P. geniculatus</i>				
1 : CP=NC=CM=IC	-15	32	8	0.0060
2 : CP=NC=CM vs IC	-10.7	25.4	1.4	0.1656
3 : CP=NC=IC vs CM	-13.6	31.2	7.3	0.0089
4 : CP=CM=IC vs NC	-13.4	30.9	6.9	0.0105
5 : NC=CM=IC vs CP	-14.8	33.6	9.6	0.0027
6 : CP=NC vs CM=IC	-14.2	32.4	8.5	0.0048
7 : CP=CM vs NC=IC	-14.2	32.5	8.6	0.0046
8 : CP=IC vs NC=CM	-10	23.9	0	0.3375
9 : CP=NC vs CM vs IC	-10.6	27.3	3.4	0.0623
10 : CP=CM vs NC vs IC	-10.5	27	3.1	0.0719
11 : CP=IC vs NC vs CM	-9.9	25.9	2	0.1252
12 : NC=CM vs CP vs IC	-9.8	25.7	1.8	0.1405
13 : NC=IC vs CP vs CM	-13.5	33.2	9.2	0.0034
14 : CM=IC vs CP vs NC	-13.4	32.8	8.8	0.0041
15 : CP vs NC vs CM vs IC	-9.8	27.7	3.7	0.0519
<i>R. pictipes</i>				
1 : CP=NC=CM=IC	-11.8	25.7	8.6	0.0039
2 : CP=NC=CM vs IC	-10.5	25.1	8	0.0053
3 : CP=NC=IC vs CM	-6.5	17	0	0.2934
4 : CP=CM=IC vs NC	-9.5	23	6	0.0147
5 : NC=CM=IC vs CP	-11.8	27.7	10.6	0.0014
6 : CP=NC vs CM=IC	-9.4	22.9	5.8	0.0160
7 : CP=CM vs NC=IC	-6.8	17.6	0.58	0.2192
8 : CP=IC vs NC=CM	-10.4	24.9	7.9	0.0057
9 : CP=NC vs CM vs IC	-6.4	19.1	2.1	0.1034
10 : CP=CM vs NC vs IC	-6.7	19.7	2.6	0.0785
11 : CP=IC vs NC vs CM	-6.4	19.1	2	0.1071
12 : NC=CM vs CP vs IC	-10.4	27	9.9	0.0020
13 : NC=IC vs CP vs CM	-6.4	19.1	2.0	0.1061
14 : CM=IC vs CP vs NC	-9.3	24.9	7.8	0.0059
15 : CP vs NC vs CM vs IC	-6.4	21.2	4.1	0.0372

Table B : Model selection approach applied to spatial distribution of the infection of the four main vector species by *T. cruzi*

S2 Table (Péneau et al.)

Model	LLH	AICc	Δ_i	ω_i
<i>P. lignarius</i>				
1 : CP=NC=CM=IC	-8.3	18.7	4	0.0318
2 : CP=NC=CM vs IC	-5.3	14.7	0	0.2378
3 : CP=NC=IC vs CM	-7.4	19	4.3	0.0275
4 : CP=CM=IC vs NC	-7.1	18.5	3.8	0.0358
5 : NC=CM=IC vs CP	-7.6	19.4	4.7	0.0224
6 : CP=NC vs CM=IC	-6.8	17.8	3.1	0.0500
7 : CP=CM vs NC=IC	-6.3	16.8	2	0.0859
8 : CP=IC vs NC=CM	-6.6	17.5	2.8	0.0590
9 : CP=NC vs CM vs IC	-5.1	16.7	2	0.0883
10 : CP=CM vs NC vs IC	-4.7	15.7	1	0.1439
11 : CP=IC vs NC vs CM	-6	18.5	3.8	0.0363
12 : NC=CM vs CP vs IC	-5.3	16.9	2.2	0.0786
13 : NC=IC vs CP vs CM	-6.3	18.9	4.2	0.0289
14 : CM=IC vs CP vs NC	-6.3	19	4.3	0.0274
15 : CP vs NC vs CM vs IC	-4.6	18	3.3	0.0465
<i>E. mucronatus</i>				
1 : CP=NC=CM=IC	-6.9	15.8	0.53	0.1305
2 : CP=NC=CM vs IC	-6.6	17.5	2.2	0.0566
3 : CP=NC=IC vs CM	-5.5	15.3	0	0.1703
4 : CP=CM=IC vs NC	-6.5	17.2	2.0	0.0633
5 : NC=CM=IC vs CP	-6.9	17.9	2.7	0.0453
6 : CP=NC vs CM=IC	-6.5	17.2	1.9	0.0653
7 : CP=CM vs NC=IC	-5.8	15.7	0.46	0.1354
8 : CP=IC vs NC=CM	-6.6	17.4	2.1	0.0588
9 : CP=NC vs CM vs IC	-5.5	17.5	2.2	0.0566
10 : CP=CM vs NC vs IC	-5.7	17.9	2.7	0.0452
11 : CP=IC vs NC vs CM	-5.5	17.5	2.2	0.0570
12 : NC=CM vs CP vs IC	-6.6	19.6	4.3	0.0194
13 : NC=IC vs CP vs CM	-5.5	17.5	2.2	0.0565
14 : CM=IC vs CP vs NC	-6.5	19.4	4.1	0.0218
15 : CP vs NC vs CM vs IC	-5.5	19.7	4.5	0.0181

Table B : Model selection approach applied to spatial distribution of the infection of the four main vector species by *T. cruzi*

S2 Table (Péneau et al.)

Exact Simpson index:

$$D_1 = 1 - \frac{1}{n_{\cdot,l}(n_{\cdot,l} - 1)} \sum_s [n_{s,l} (n_{s,l} - 1)]$$

where $n_{\cdot,l}$ is the observed number of individuals of all species in landscape l, and $n_{s,l}$ the observed numbers of individuals of each species s in landscape l.

Equitability index:

$$E_1 = \frac{D_1}{D_{1 \max}}$$

where D_1 is the exact Simpson index value in landscape l and $D_{1 \max}$ the highest exact Simpson index value for the given number of species and the sample size in landscape l.

S2 Table (Péneau et al.)