

Supplementary information

Table S1. Number of mosquito species collected by breeding site in two remnants of Atlantic Forest in the city of São Paulo, Brazil.

Area	Species	Artificial	Epiphytic bromeliads	Ground bromeliads	Bamboo hole	Lake	Tree hollow	Bamboo hollow	Rock	Ponds	Total
Cantareira State Park	<i>Ad. (Ady.) squamipennis</i>	0	0	0	0	0	0	0	-	0	0
	<i>Ae. (Grg.) fluviatilis</i>	0	0	0	0	0	0	0	-	0	0
	<i>Ae. (Och.) crinifer</i>	0	0	0	0	0	0	0	-	20	20
	<i>Ae. (Och.) nubilus</i>	0	0	0	0	0	0	0	-	0	0
	<i>Ae. (Och.) rhyacophilus</i>	0	0	0	0	0	0	0	-	0	0
	<i>Ae. (Och.) scapularis</i>	0	0	0	0	0	0	0	-	0	0
	<i>Ae. (Pro.) terrens</i>	0	0	0	0	0	0	0	-	0	0
	<i>Ae. (Stg.) aegypti</i>	35	0	0	0	0	0	22	-	0	57
	<i>Ae. (Stg.) albopictus</i>	31	4	0	0	0	0	7	-	0	42
	<i>An. (Ker.) bellator</i>	0	1	0	0	0	0	0	-	0	1
	<i>An. (Ker.) cruzii</i>	0	253	4	0	0	0	0	-	0	257
	<i>An. (Nys.) strodei</i>	4	0	0	0	10	0	0	-	0	14
	<i>Cx. (Car.) iridescens</i>	493	18	0	276	0	5	102	-	10	904
	<i>Cx. (Cux.) brami</i>	0	0	0	0	0	0	0	-	87	87
	<i>Cx. (Cux.) chidesteri</i>	0	0	0	0	0	0	0	-	0	0
	<i>Cx. (Cux.) coronator</i>	16	0	0	0	0	0	0	-	0	16
	<i>Cx. (Cux.) dolosus</i>	151	7	0	0	4	67	0	-	347	576
	<i>Cx. (Cux.) eduardoi</i>	45	0	0	0	0	6	0	-	100	151
	<i>Cx. (Cux.) lygrus</i>	0	0	0	0	0	0	0	-	36	36
	<i>Cx. (Cux.) mollis</i>	0	0	0	0	0	0	0	-	2	2
	<i>Cx. (Cux.) nigripalpus</i>	0	0	0	0	0	0	0	-	2	2
	<i>Cx. (Cux.) quinquefasciatus</i>	0	0	0	0	0	0	0	-	0	0
	<i>Cx. (Cux.) restuans</i>	0	0	0	0	0	0	0	-	3	3

<i>Cx. (Mcx.) albipes</i>	4	135	2	0	0	0	0	-	0	141
<i>Cx. (Mcx.) aphylactus</i>	0	0	0	0	0	0	0	-	0	0
<i>Cx. (Mcx.) aureus</i>	0	0	0	0	0	0	0	-	0	0
<i>Cx. (Mcx.) daumasturus</i>	0	1	0	0	0	0	0	-	0	1
<i>Cx. (Mcx.) dubitans</i>	0	19	0	0	0	0	0	-	0	19
<i>Cx. (Mcx.) fuscatus</i>	0	5	0	0	0	0	0	-	0	5
<i>Cx. (Mcx.) imitator</i>	3	297	10	2	0	0	0	-	0	312
<i>Cx. (Mcx.) inimitabilis</i>	0	6	0	0	0	0	0	-	0	6
<i>Cx. (Mcx.) lanei</i>	0	32	0	0	0	0	0	-	0	32
<i>Cx. (Mcx.) neglectus</i>	0	14	0	0	0	0	0	-	0	14
<i>Cx. (Mcx.) pleuristriatus</i>	0	119	109	0	0	0	0	-	0	228
<i>Cx. (Mcx.) reducens</i>	0	5	0	0	0	0	0	-	0	5
<i>Cx. (Mcx.) worontzowi</i>	0	151	0	0	0	0	0	-	0	151
<i>Cx. (Mel.) akritos</i>	0	0	0	0	0	0	0	-	0	0
<i>Cx. (Mel.) bahiensis</i>	0	0	0	0	66	0	0	-	34	100
<i>Cx. (Mel.) intrincatus</i>	4	3	0	0	23	0	0	-	5	35
<i>Cx. (Mel.) pilosus</i>	0	0	0	0	0	0	0	-	0	0
<i>Cx. (Mel.) ribeirensis</i>	0	0	0	0	0	0	0	-	0	0
<i>Cx. (Mel.) vaxus</i>	0	0	0	0	212	0	0	-	0	212
<i>Cx. ocellatus</i>	0	43	0	8	0	0	0	-	0	51
<i>Hg. (Con.) leucocelaenus</i>	20	0	0	5	0	37	9	-	0	71
<i>Li. durhami</i>	877	0	0	0	0	0	0	-	0	877
<i>Lu. (Lut.) bigoti</i>	3	0	0	0	0	1	0	-	23	27
<i>Ma. (Man.) indubitans</i>	0	0	0	0	0	0	0	-	0	0
<i>Ps. (Jan.) albigena</i>	0	0	0	0	0	0	0	-	0	0
<i>Ps. (Jan.) ferox</i>	0	0	0	0	0	0	0	-	3	3
<i>Ru. (Run.) cerqueirai</i>	0	0	0	7	0	0	0	-	0	7
<i>Sa. (Sab.) purpureus</i>	0	0	0	0	0	3	0	-	0	3

	<i>Sh. fluviatilis</i>	0	0	0	99	0	0	46	-	0	145
	<i>Tr. pallidiventer</i>	2	0	0	23	0	0	3	-	0	28
	<i>Tx. (Lyn.) portoricensis</i>	0	0	0	0	0	0	0	-	0	0
	<i>Tx. (Lyn.) theobaldi</i>	3	0	0	0	0	0	0	-	0	3
	<i>Tx. tricophygyus</i>	0	3	0	0	0	0	0	-	0	3
	<i>Ur. (Ura.) geometrica</i>	0	0	0	0	1	0	0	-	0	1
	<i>Ur. (Ura.) lowii</i>	0	0	0	0	1	0	0	-	0	1
	<i>Ur. (Ura.) pulcherrima</i>	0	0	0	0	0	0	0	-	0	0
	<i>Wy. (Mim.) oblita</i>	0	0	0	5	0	0	0	-	0	5
	<i>Wy. (Pho.) davisi</i>	0	117	4	0	0	0	0	-	0	121
	<i>Wy. (Pho.) edwardsi</i>	0	24	0	0	0	0	0	-	0	24
	<i>Wy. (Pho.) incaudata</i>	0	0	0	0	0	0	0	-	0	0
	<i>Wy. (Pho.) pallidoventer</i>	0	58	3	0	0	0	0	-	0	61
	<i>Wy. (Pho.) palmata</i>	0	3	0	0	0	0	0	-	0	3
	<i>Wy. (Pho.) pilicauda</i>	0	0	0	0	0	0	0	-	0	0
	<i>Wy. (Pho.) splendida</i>	0	0	0	0	0	0	0	-	0	0
	<i>Wy. (Pho.) theobaldi</i>	3	192	9	0	0	0	0	-	0	204
	<i>Wy. (Spi.) airosai</i>	0	1	0	0	0	0	0	-	0	1
	<i>Wy. (Wyo.) lutzi</i>	0	0	0	9	0	0	0	-	0	9
	<i>Wy. aporonoma</i>	0	0	0	0	0	0	0	-	0	0
	<i>Wy. personata</i>	0	0	0	4	0	0	0	-	0	4
	<i>Wy. serratoria</i>	0	0	0	0	0	0	0	-	0	0
	<i>Total</i>	1694	1511	141	438	317	119	189	0	672	5081
Capivari-Monos conservation area	<i>Ad. (Ady.) squamipennis</i>	0	0	0	-	1	-	0	0	0	1
	<i>Ae. (Grg.) fluviatilis</i>	229	0	0	-	5	-	0	9	0	243
	<i>Ae. (Och.) crinifer</i>	6	0	0	-	47	-	0	0	73	126
	<i>Ae. (Och.) nubilus</i>	0	0	0	-	0	-	0	0	6	6
	<i>Ae. (Och.) rhyacophilus</i>	42	0	0	-	0	-	0	145	0	187

<i>Ae. (Och.) scapularis</i>	20	0	0	-	5	-	0	12	37	74
<i>Ae. (Pro.) terreus</i>	0	0	0	-	0	-	3	0	0	3
<i>Ae. (Stg.) aegypti</i>	12	0	0	-	0	-	0	0	0	12
<i>Ae. (Stg.) albopictus</i>	73	2	0	-	0	-	26	0	0	101
<i>An. (Ker.) bellator</i>	0	0	0	-	0	-	0	0	0	0
<i>An. (Ker.) cruzii</i>	0	108	12	-	0	-	0	0	0	120
<i>An. (Nys.) strodei</i>	0	0	0	-	183	-	0	0	12	195
<i>Cx. (Car.) iridescens</i>	37	0	0	-	0	-	31	0	0	68
<i>Cx. (Cux.) brami</i>	7	0	0	-	6	-	0	0	13	26
<i>Cx. (Cux.) chidesteri</i>	0	0	0	-	3	-	0	0	0	3
<i>Cx. (Cux.) coronator</i>	104	0	0	-	7	-	0	8	111	230
<i>Cx. (Cux.) dolosus</i>	307	0	0	-	53	-	0	77	7	444
<i>Cx. (Cux.) eduardoi</i>	75	0	3	-	40	-	0	3	9	130
<i>Cx. (Cux.) lygrus</i>	0	0	0	-	4	-	0	0	2	6
<i>Cx. (Cux.) mollis</i>	15	0	0	-	7	-	0	9	0	31
<i>Cx. (Cux.) nigripalpus</i>	0	0	0	-	0	-	0	0	6	6
<i>Cx. (Cux.) quinquefasciatus</i>	171	4	0	-	0	-	0	14	9	198
<i>Cx. (Cux.) restuans</i>	0	0	0	-	0	-	0	0	0	0
<i>Cx. (Mcx.) albipes</i>	8	89	35	-	0	-	18	0	0	150
<i>Cx. (Mcx.) aphyllactus</i>	0	0	3	-	0	-	0	0	0	3
<i>Cx. (Mcx.) aureus</i>	9	0	0	-	0	-	0	0	0	9
<i>Cx. (Mcx.) daumasturus</i>	0	6	0	-	0	-	0	0	0	6
<i>Cx. (Mcx.) dubitans</i>	0	38	6	-	0	-	0	0	0	44
<i>Cx. (Mcx.) fuscatus</i>	0	21	1	-	0	-	0	0	0	22
<i>Cx. (Mcx.) imitator</i>	0	180	31	-	0	-	0	0	0	211
<i>Cx. (Mcx.) inimitabilis</i>	0	5	2	-	0	-	0	0	0	7
<i>Cx. (Mcx.) lanei</i>	0	2	0	-	0	-	0	0	0	2

<i>Cx. (Mcx.) neglectus</i>	0	45	5	-	0	-	0	0	0	50
<i>Cx. (Mcx.) pleuristriatus</i>	85	144	180	-	0	-	8	0	0	417
<i>Cx. (Mcx.) reducens</i>	0	0	0		0	-	0	0	0	0
<i>Cx. (Mcx.) worontzowi</i>	0	57	0	-	0	-	0	0	0	57
<i>Cx. (Mel.) akritos</i>	1	0	0	-	0	-	0	0	0	1
<i>Cx. (Mel.) bahiensis</i>	0	0	0	-	2	-	0	0	6	8
<i>Cx. (Mel.) intricatus</i>	0	0	0	-	2	-	0	0	14	16
<i>Cx. (Mel.) pilosus</i>	1	0	0	-	14	-	0	0	20	35
<i>Cx. (Mel.) ribeirensis</i>	0	0	0	-	8	-	0	0	0	8
<i>Cx. (Mel.) vaxus</i>	0	0	0	-	89	-	0	0	0	89
<i>Cx. ocellatus</i>	0	13	0	-	0	-	0	0	0	13
<i>Hg. (Con.) leucocelaenus</i>	0	0	0	-	0	-	0	0	0	0
<i>Li. durhami</i>	611	0	0	-	0	-	0	0	0	611
<i>Lu. (Lut.) bigoti</i>	6	0	0	-	0	-	0	25	0	31
<i>Ma. (Man.) indubitans</i>	0	0	0	-	3	-	0	0	0	3
<i>Ps. (Jan.) albigenu</i>	0	0	0	-	0	-	0	0	2	2
<i>Ps. (Jan.) ferox</i>	0	0	0	-	3	-	0	0	11	14
<i>Ru. (Run.) cerqueirai</i>	0	0	0	-	0	-	0	0	0	0
<i>Sa. (Sab.) purpureus</i>	2	0	0	-	0	-	5	0	0	7
<i>Sh. fluviatilis</i>	0	0	0	-	0	-	0	0	0	0
<i>Tr. pallidiventer</i>	0	0	0	-	0	-	0	0	0	0
<i>Tx. (Lyn.) portoricensis</i>	1	0	0	-	0	-	0	0	0	1
<i>Tx. (Lyn.) theobaldi</i>	25	0	0	-	1	-	1	0	0	27
<i>Tx. tricophygus</i>	0	0	0	-	0	-	0	0	0	0
<i>Ur. (Ura.) geometrica</i>	0	0	0	-	24	-	0	0	0	24
<i>Ur. (Ura.) lowii</i>	0	0	0	-	5	-	0	0	0	5
<i>Ur. (Ura.) pulcherrima</i>	0	0	0	-	3	-	0	0	0	3
<i>Wy. (Mim.) oblita</i>	0	0	0	-	0	-	0	0	0	0
<i>Wy. (Pho.) davisi</i>	1	122	18	-	0	-	0	0	0	141

<i>Wy. (Pho.) edwardsi</i>	0	7	2	-	0	-	0	0	0	9
<i>Wy. (Pho.) incaudata</i>	0	42	1	-	0	-	0	0	0	43
<i>Wy. (Pho.) pallidoventer</i>	1	14	0	-	0	-	0	0	0	15
<i>Wy. (Pho.) palmata</i>	0	12	0	-	0	-	0	0	0	12
<i>Wy. (Pho.) pilicauda</i>	0	14	1	-	0	-	0	0	0	15
<i>Wy. (Pho.) splendida</i>	0	4	0	-	0	-	0	0	0	0
<i>Wy. (Pho.) theobaldi</i>	0	138	4	-	0	-	0	0	0	142
<i>Wy. (Spi.) airosai</i>	0	0	0	-	0	-	0	0	0	0
<i>Wy. (Wyo.) lutzii</i>	0	0	0	-	0	-	0	0	0	0
<i>Wy. aporonoma</i>	0	0	0	-	0	-	7	0	0	7
<i>Wy. personata</i>	0	0	0	-	0	-	0	0	0	0
<i>Wy. serratoria</i>	0	1	0	-	0	-	0	0	0	1
Total	1849	1068	304	0	515	0	99	302	338	4471

Table S2. Range of water volume, range of physicochemical parameters and coefficient of variation of different aquatic habitats explored during immature mosquito collections in two remnants of Atlantic Forest in the city of São Paulo, Brazil.

Area	Aquatic habitat	Volume (mL)	pH	Conductivity (µS/cm)	Total dissolved solids	Salinity (psu)
PEC	Artificial (N=30)	150 - 6000 CV:177%	4.52 - 8.44 CV:19%	30 - 639 CV:198%	15 - 319 CV:196%	0.01 - 0.31 CV:213%
	Epiphytic bromeliad (N=54)	100 - 1400 CV:221%	3.70 - 8.42 CV:19%	10 - 288 CV: 266%	5 - 144 CV:266%	0.01 - 0.14 CV:289%
	Ground bromeliad (N=2)	200 - 450 CV:54%	5.60 - 8.86 CV:20%	11 - 192 CV:204%	05 - 96 CV:202%	0.01 - 0.09 CV:218%
	Bamboo hole (N=4)	300 - 450 CV:29%	4.56 - 6.73 CV:20%	60 - 557 CV:268%	30 - 279 CV:268%	0.03 - 0.27 CV:290%
	Lake (N=11)	2000 - 12000 CV:138%	5.84 - 8.28 CV:19%	24 - 77 CV:203%	12 - 38 CV:201%	0.01 - 0.04 CV:212%
	Tree hollow (N=9)	100 - 500 CV:42%	5.80 - 7.69 CV:19%	27 - 1560 CV:199%	13 - 780 CV:197%	0.01 - 0.78 CV:212%
	Bamboo hollow (N=5)	200 - 300 CV:32%	5.21 - 6.89 CV:18%	188 - 2633 CV:203%	94 - 1316 CV:201%	0.09 - 1.37 CV:216%
	Pond (N=9)	800 - 16000 CV:240%	4.60 - 6.82 CV:19%	45 - 265 CV:266%	23 - 132 CV:266%	0.02 - 0.12 CV:289%
APA	Artificial (N=26)	150 - 10000 CV:152%	3.84 - 10.45 CV:19%	33 - 552 CV:258%	16 - 276 CV:258%	0.01 - 0.27 CV:281%
	Epiphytic bromeliad (N=62)	100 - 1000 CV:177%	3.57 - 5.85 CV:19%	12 - 749 CV:261%	6 - 375 CV:261%	0.00 - 0.36 CV:284%
	Ground bromeliad (N=9)	200 - 600 CV:199%	4.15 - 6.02 CV:19%	25 - 357 CV:266%	12 - 178 CV:266%	0.01 - 0.17 CV:289%
	Lake (N=22)	1200 - 16000 CV:160%	6.1 - 7.62 CV:19%	51 - 569 CV:265%	26 - 284 CV:265%	0.02 - 0.28 CV:289%
	Bamboo hollow (N=3)	350 - 500 CV:200%	6.50 - 7.89 CV:19%	499 - 6147 CV:262%	250 - 3074 CV:262%	0.24 - 3.31 CV:283%
	Rock pond (N=4)	1200 - 6000 CV:182%	6.18 - 6.44 CV:18%	35 - 224 CV:166%	17 - 113 CV:166%	0.01 - 0.11 CV:176%
	Pond (N=6)	3000 - 12000 CV:193%	5.99 - 7.49 CV:19%	38 - 380 CV:255%	19 - 190 CV:255%	0.02 - 0.18 CV:278%

CV = Coefficient of variation.