

Supplementary material

Attraction of mosquitoes to primate host odours and implications for zoonotic *Plasmodium* transmission

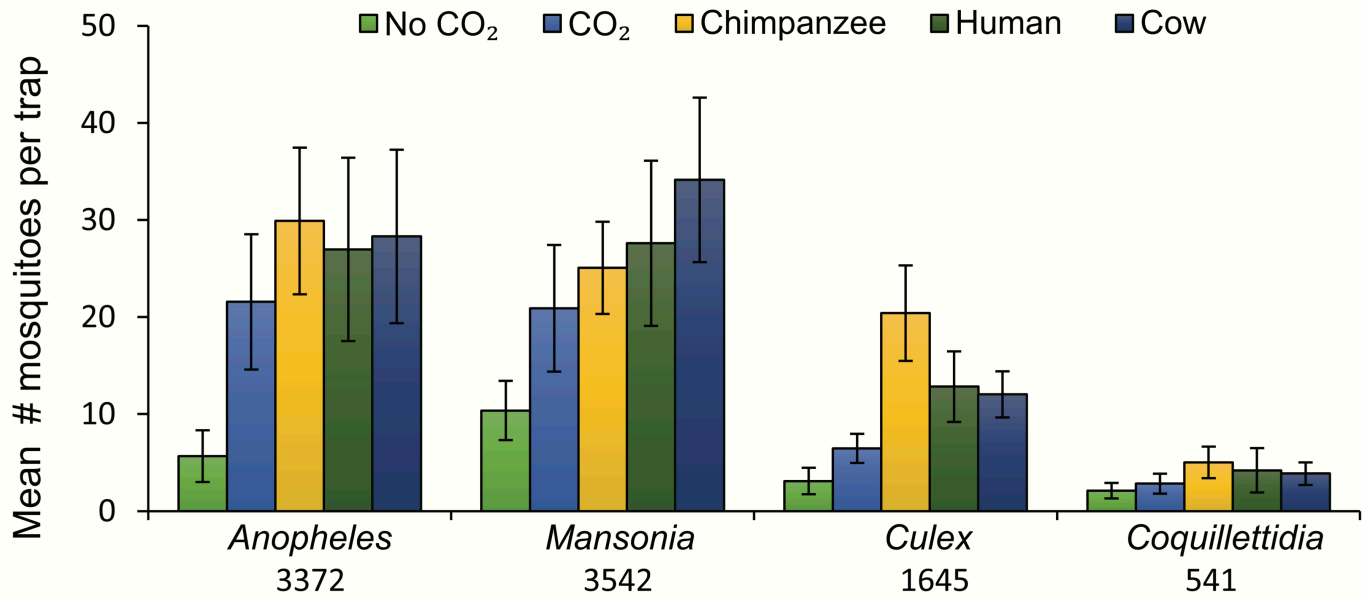


Figure S1. Attraction of mosquito species to different host odours trapped with odour baited Suna traps. Bars represent the mean number of mosquitoes trapped per odour baited Suna trap per night using different host odour treatments: no odours, CO₂ only, chimpanzee odours with CO₂, human odours with CO₂ and cow odours with CO₂. Error bars represent standard error of the mean. Numbers in the bars indicate the total number of mosquitoes caught per species. N = 30 trapping nights.

Table S1. Samples collected and Plasmodium prevalence.

Host species	Type of sample	Number of samples	<i>Plasmodium</i> sp. detected
<i>Pan troglodytes</i>	Blood	85	2 (2.4 %)
Mosquito	Whole specimen		
<i>Aedes</i> spp.		68	n/a
<i>Mansonia</i> spp.		6097	n/a
<i>Culex</i> spp.		1742	n/a
<i>Coquillettidia</i> spp.		549	n/a
<i>Anopheles</i> spp.		5145	22 (0.4 %)
<i>An. obscurus</i>		5002	21 (0.4 %)
<i>An. ziemanni</i>		87	0
<i>An. paludis</i>		23	1 (4.3 %)
<i>An. gambiae</i> s.l.		21	0
<i>An. nili</i>		6	0
<i>An. moucheti</i>		4	0
<i>An.</i> spp.		2	0
<i>Mansonia</i>		Blood meal (human)	244

Table S2. Pairwise comparisons of mosquito trap catches with different odour baits.

P-values (GLM) shown are based on proportions of caught mosquitoes using the Suna trap with different odour baits. Treatments are significant different at $P < 0.05$. Mean number of trapped mosquitoes can be found in Table 1.

Treatments		<i>Anopheles spp.</i>	<i>Mansonia spp.</i>	<i>Culex spp.</i>	<i>Coquillettidia spp.</i>
Chimpanzee + CO ₂	CO ₂	0.031	0.311	< 0.001	0.270
	Cow + CO ₂	0.577	0.022	0.002	0.348
	Human+ CO ₂	0.240	0.831	0.002	0.326
	No CO ₂	< 0.001	<0.001	< 0.001	0.115
CO ₂	Chimpanzee + CO ₂	0.031	0.311	< 0.001	0.270
	Cow + CO ₂	0.102	0.001	0.002	0.825
	Human + CO ₂	0.306	0.060	0.002	0.867
	No CO ₂	< 0.001	< 0.001	0.083	0.615
Cow + CO ₂	Chimpanzee + CO ₂	0.577	0.022	0.002	0.348
	CO ₂	0.102	0.001	0.002	0.825
	Human + CO ₂	0.549	0.036	0.977	0.957
	No CO ₂	< 0.001	<0.001	< 0.001	0.456
Human + CO ₂	Chimpanzee + CO ₂	0.240	0.831	0.002	0.326
	CO ₂	0.306	0.060	0.002	0.867
	Cow + CO ₂	0.276	0.036	0.977	0.957
	No CO ₂	< 0.001	<0.001	< 0.001	0.492
No CO ₂	Chimpanzee + CO ₂	< 0.001	<0.001	< 0.001	0.115
	CO ₂	< 0.001	<0.001	0.083	0.615
	Cow + CO ₂	< 0.001	<0.001	< 0.001	0.456
	Human + CO ₂	< 0.001	<0.001	< 0.001	0.492

Table S3. *Plasmodium* Cyt-b sequences used in phylogenetic analyses

Species	Accession number
TC01 <i>An. obscurus</i>	MK502145
TC02 <i>An. obscurus</i>	MK502146
TC03 <i>An. obscurus</i>	MK502147
TC04 <i>An. obscurus</i>	MK502148
TC05 <i>An. obscurus</i>	MK502149
TC06 <i>An. obscurus</i>	MK502150
TC07 <i>An. obscurus</i>	MK502151
TC08 <i>An. obscurus</i>	MK502152
TC09 <i>An. obscurus</i>	MK502153
TC10 <i>An. obscurus</i>	MK502154
TC11 <i>An. obscurus</i>	MK502155
TC12 <i>An. obscurus</i>	MK502156
TC13 <i>An. obscurus</i>	MK502157
TC14 <i>An. obscurus</i>	MK502158
TC15 <i>An. obscurus</i>	MK502159
TC16 <i>An. obscurus</i>	MK502160
TC17 <i>An. obscurus</i>	MK502161
TC18 <i>An. obscurus</i>	MK502162
TC19 <i>An. obscurus</i>	MK502163
TC20 <i>An. paludis</i>	MK502164
TC21 <i>An. obscurus</i>	MK502165
TC22 <i>An. obscurus</i>	MK502166
<i>Plasmodium</i> sp.	KY631955
<i>Plasmodium</i> sp.	KY631942
<i>Plasmodium</i> sp.	AB308052
<i>P. odocoilei</i>	MH177860
<i>Plasmodium</i> sp._ <i>An. vinckei</i>	KU318100
<i>Plasmodium</i> sp._ <i>An. obscurus</i>	KU318108
<i>Plasmodium</i> sp._ <i>An. obscurus</i>	KU318107
<i>Plasmodium</i> sp._ <i>An. moucheti</i>	KU318051
<i>Plasmodium</i> sp._ <i>An. marshallii</i>	KU318048
<i>Plasmodium</i> sp._ <i>An. gabonensis</i>	KU318037
<i>P. minuviride</i>	EU834703
<i>P. lomamiensis</i>	KY790541
<i>P. hylobati</i>	AF069618
<i>P. vivax</i>	NC7243
<i>P. relictum</i>	AY733088
<i>P. relictum</i>	AY099032
<i>P. reichenowi</i>	AJ251941
<i>P. preafalci parum</i>	HM235296
<i>P. ovale</i>	AB354571
<i>P. mexicanum</i>	AB375765
<i>P. malariae</i>	AB354570
<i>P. knowlesi</i>	AY722797
<i>P. juxtannucleare</i>	AB250415
<i>P. gonderi</i>	AB434918
<i>P. giganteum</i>	AY099053
<i>P. gallinaceum</i>	AB250690
<i>P. gaboni</i>	FJ895307
<i>P. falci parum</i>	AY282924
<i>P. elongatum</i>	AF069611
<i>P. cynomolgi</i>	AB434919
<i>P. chabaudi</i>	AY099050
<i>P. blacklocki</i>	HM235304
<i>P. billcollinsi</i>	GQ355477
<i>P. azurophilum</i>	AY099055
<i>P. athururi</i>	AY099054
<i>P. agamae</i>	AY099048
<i>P. adleri</i>	HM235303
<i>Hepatocystis</i> sp.	JQ070892
<i>Hepatocystis</i> sp.	JQ070884
<i>Hepatocystis</i> sp.	JQ070873
<i>Hepatocystis</i> sp.	JF923759
<i>Hepatocystis</i> sp.	DQ396528
<i>Hepatocystis</i> sp.	AF069626
<i>Haemosporida</i> sp.	KT367837