

Table S1. Numbers of mapped reads and observed bacterial taxa in the *Aedes aegypti* mosquitoes (N = numbers).

Sample ID	N, Mapped Reads	N, Species	N, Genus	N, Family	N, Order	N, Class	N, Phylum
S_51	381558	363	160	80	32	15	8
S_193	71472	354	162	78	33	13	5
S_160	233650	233	128	128	31	14	6
S_159	368118	401	223	92	38	15	6
S_121	183005	237	148	71	30	13	7
S_169	48981	181	117	59	23	10	4
S_126	740787	287	173	80	30	14	5
S_186	249173	462	249	101	38	17	7
S_178	118283	372	231	99	37	15	5
S_175	140777	310	179	85	33	16	6
S_87	412792	287	154	75	29	14	5
S_107	24405	138	90	48	23	9	4
S_22	321032	307	169	82	34	17	8
S_28	685716	300	164	73	29	14	5
S_92	52771	349	165	79	34	15	6
S_106	123018	385	181	85	29	14	5
S_104	15875	95	49	32	16	9	4
S_148	104255	100	48	18	10	6	4
S_02	232945	607	257	102	38	17	7
S_161	8254	40	29	16	10	5	3
S_132	130875	275	137	63	27	13	5
S_59	85698	266	127	62	29	14	7
S_88	123075	166	86	46	19	9	6
S_122	75390	333	158	83	29	13	5
S_42	100386	216	121	59	28	13	5
S_55	120631	391	183	86	31	13	5
S_30	151154	399	182	84	35	15	6
S_19	114344	206	103	62	31	13	5
S_40	27900	216	120	70	30	15	6
S_58	144690	461	199	94	35	16	6
S_167	145536	242	120	61	26	10	5
S_163	44574	96	61	38	21	8	4
S_25	62345	264	127	64	28	11	5
S_155	321540	190	101	51	22	9	4
S_36	159677	244	126	63	25	11	5

Table S2. Relative abundance (%) of the most prominent bacterial taxa associated with human-fed (HF), non human-fed (NHF) and non-fed (NF) *Aedes aegypti* mosquitoes.

Taxa	HF	NHF	NF	<i>p</i> -Values of within Group Differences	<i>p</i> -Values of between Group Differences		
					HFvsNHF	HFvsNF	NHFvsNF
Phylum							
<i>Actinobacteria</i>	25.53	16.06	6.77	0.029	0.032	0.065	0.232
<i>Bacteroidetes</i>	2.45	2.30	4.42	0.074	0.083	0.846	0.625
<i>Deinococcus-Thermus</i>	0.08	0.26	0.05	0.077	0.275	0.477	0.570

<i>Fibrobacteres</i>	0.00	0.00	0.00	0.201	0.083	0.492	0.999
<i>Proteobacteria</i>	62.26	71.14	77.78	0.0001	0.001	0.002	0.193
Family							
<i>Acetobacteraceae</i>	1.01	0.60	0.31	0.170	0.065	0.084	0.477
<i>Aerococcaceae</i>	1.08	2.23	0.48	0.024	0.206	0.009	0.232
<i>Bacillaceae</i>	2.93	4.02	8.17	0.079	0.123	0.695	0.106
<i>Bartonellaceae</i>	0.24	1.09	0.00	0.439	0.438	0.125	0.500
<i>Burkholderiaceae</i>	8.46	8.53	3.04	0.170	0.148	0.232	0.193
<i>Caulobacteraceae</i>	12.17	18.28	31.77	0.019	0.831	0.084	0.193
<i>Chromatiaceae</i>	0.87	1.19	1.36	0.096	0.206	0.999	0.232
<i>Clostridiales</i>	0.53	0.15	0.06	0.072	0.014	0.064	0.734
<i>Comamonadaceae</i>	5.32	2.72	6.31	0.020	0.014	0.106	0.556
<i>Corynebacteriaceae</i>	10.36	4.75	2.76	0.101	0.042	0.131	0.625
<i>Dietziaceae</i>	1.24	0.15	0.05	0.169	0.322	0.019	0.312
<i>Enterobacteriaceae</i>	3.14	13.19	1.22	0.599	0.898	0.769	0.625
<i>Flavobacteriaceae</i>	1.29	1.59	4.05	0.164	0.102	0.695	0.769
<i>Geodermatophilaceae</i>	0.18	0.54	0.13	0.069	0.054	0.065	0.922
<i>Hyphomicrobiaceae</i>	0.61	0.04	0.21	0.001	0.009	0.064	0.039
<i>Intrasporangiaceae</i>	0.32	1.48	0.12	0.030	0.577	0.014	0.160
<i>Methylophilaceae</i>	0.50	0.70	0.65	0.461	0.175	0.652	0.999
<i>Microbacteriaceae</i>	0.56	0.86	0.12	0.005	0.206	0.027	0.496
<i>Micrococcaceae</i>	3.19	2.23	2.05	0.030	0.032	0.480	0.557
<i>Moraxellaceae</i>	10.39	12.50	14.67	0.220	0.042	0.492	0.490
<i>Nocardoidaceae</i>	0.67	0.47	0.38	0.033	0.080	0.040	0.999
<i>Planococcaceae</i>	0.34	0.59	0.10	0.169	0.278	0.064	0.160
<i>Propionibacteriaceae</i>	0.94	1.16	1.02	0.489	0.413	0.846	0.922
<i>Pseudomonadaceae</i>	10.53	6.35	5.87	0.040	0.042	0.375	0.922
<i>Pseudonocardiaceae</i>	0.57	1.42	0.29	0.042	0.067	0.006	0.232
<i>Rhodobacteraceae</i>	3.82	2.00	1.76	0.003	0.019	0.014	0.846
<i>Sinobacteraceae</i>	1.58	0.87	1.83	0.136	0.700	0.275	0.820
<i>Sphingomonadaceae</i>	0.58	0.84	0.97	0.114	0.240	0.432	0.625
<i>Staphylococcaceae</i>	1.57	1.57	2.20	0.791	0.175	0.556	0.322
<i>Unclassified_Burkholderiales</i>	5.55	0.79	2.33	0.015	0.032	0.769	0.432
<i>Xanthomonadaceae</i>	1.01	0.79	0.63	0.129	0.019	0.160	0.922
Genus							
<i>Acinetobacter</i>	9.02	11.95	14.17	0.238	0.032	0.625	0.492
<i>Aerococcus</i>	0.75	1.60	0.32	0.024	0.148	0.004	0.275
<i>Aquabacterium</i>	3.76	0.57	2.18	0.018	0.024	0.846	0.232
<i>Bacillus</i>	2.56	3.66	7.55	0.062	0.206	0.695	0.135
<i>Bartonella</i>	0.24	1.09	0.00	0.439	0.437	0.125	0.500
<i>Brevundimonas</i>	3.34	6.03	12.62	0.014	0.765	0.049	0.232
<i>Caulobacter</i>	8.77	12.20	19.07	0.023	0.966	0.025	0.131
<i>Comamonas</i>	0.59	0.14	0.09	0.093	0.084	0.084	>0.999
<i>Corynebacterium</i>	10.36	4.75	2.76	0.100	0.042	0.131	0.625
<i>Curvibacter</i>	0.31	0.57	1.94	0.237	0.123	0.203	>0.999
<i>Dietzia</i>	1.24	0.15	0.05	0.169	0.322	0.020	0.312
<i>Elizabethkingia</i>	0.00	0.00	2.03	NA	NA	NA	NA
<i>Enhydrobacter</i>	0.59	0.25	0.30	0.009	0.019	0.020	0.486
<i>Enterobacter</i>	0.04	1.75	0.04	0.173	0.846	0.064	0.172
<i>Facklamia</i>	0.28	0.61	0.13	0.225	0.638	0.084	0.074
<i>Flavobacterium</i>	0.76	0.95	1.71	0.171	0.024	0.922	0.232
<i>Gemmobacter</i>	0.57	0.14	0.16	0.020	0.024	0.084	0.695

<i>Hydrogenophaga</i>	1.20	0.05	0.10	0.032	0.027	0.787	0.262
<i>Klebsiella</i>	0.04	0.64	0.10	0.352	0.131	>0.999	0.297
<i>Kocuria</i>	1.36	0.72	1.10	0.018	0.014	0.027	0.232
<i>Leclercia</i>	0.13	6.14	0.02	0.966	0.945	0.164	0.887
<i>Limnobacter</i>	8.28	8.24	2.97	0.115	0.102	0.275	0.232
<i>Methylibium</i>	2.11	1.06	2.57	0.189	0.042	0.557	0.695
<i>Methylophilus</i>	0.40	0.66	0.03	0.139	0.131	0.496	>0.999
<i>Methylothermus</i>	0.09	0.05	0.62	0.679	0.578	0.469	0.516
<i>Micrococcus</i>	1.59	1.30	0.74	0.044	0.067	0.019	0.275
<i>Nevskia</i>	1.49	0.85	1.72	0.004	0.067	0.084	0.193
<i>Nocardioides</i>	0.59	0.44	0.36	0.044	0.067	0.037	0.769
<i>Paracoccus</i>	0.87	0.78	0.64	0.053	0.014	0.105	0.275
<i>Piscinibacter</i>	0.61	0.00	0.02	0.200	0.031	0.460	0.297
<i>Propionibacterium</i>	0.89	1.13	0.99	0.493	0.365	>0.999	0.922
<i>Pseudomonas</i>	9.50	6.09	5.46	0.065	0.042	0.232	0.846
<i>Pseudonocardia</i>	0.37	1.02	0.24	0.207	0.067	0.009	0.375
<i>Raoultella</i>	0.01	2.63	0.00	0.509	0.688	0.625	0.312
<i>Rheinheimera</i>	0.87	1.19	1.36	0.096	0.206	>0.999	0.232
<i>Rhizobacter</i>	0.99	0.02	0.01	0.051	0.019	0.039	0.844
<i>Rhodobacter</i>	1.72	0.67	0.60	0.008	0.019	0.027	>0.999
<i>Rubrivivax</i>	0.89	0.20	0.13	0.224	0.147	0.084	0.734
<i>Serinicoccus</i>	0.14	1.00	0.05	0.023	0.413	0.027	0.148
<i>Serratia</i>	2.66	0.94	0.01	0.493	>0.999	0.562	>0.999
<i>Sphingomonas</i>	0.33	0.64	0.72	0.163	0.175	0.695	0.637
<i>Staphylococcus</i>	0.92	1.04	2.04	0.354	0.413	0.922	0.193
<i>Zavarzinia</i>	0.55	0.05	0.00	0.110	0.937	0.125	0.500

Bold: Indicates statistically significant p -values < 0.05; NA: Statistical tests not performed due to exclusive presence of the genus in only one group.