

Table S1. Collection and sequencing information of *Anopheles lesteri* in this study

Species	Collection site	Year	Coordinate	Row data reads	Clean data reads	Mapping reads	Mean depth
<i>An. lesteri</i> (I)	Pujiang City, Sichuan Province, China	2006	103.51°E, 30.20°N	57,068,184	56,937,040	266,795	2,553
<i>An. lesteri</i> (II)	Pujiang City, Sichuan Province, China	2006	103.51°E, 30.20°N	93,053,680	91,412,210	88,693	700
<i>An. lesteri</i> (III)	Pujiang City, Sichuan Province, China	2007	103.51°E, 30.20°N	100,939,412	95,440,544	566,272	4,975

Table S2. Composition of mitochondrial genome obtained in this study

Species	Length(bp)	A%	T%	G%	C%	A+T%	A-T skew	G-C skew
Whole Mitogenome								
<i>An. belenrae</i>	15,418	40.19	38.05	9.20	12.56	78.23	0.027	-0.154
<i>An. crawfordi</i>	15,421	40.33	38.07	9.12	12.48	78.41	0.029	-0.156
<i>An. junlianensis</i>	15,407	40.11	38.04	9.20	12.65	78.15	0.026	-0.158
<i>An. kleini</i>	15,416	40.13	38.13	9.24	12.50	78.26	0.026	-0.150
<i>An. kunmingensis</i>	15,403	40.23	37.95	9.15	12.67	78.17	0.029	-0.161
<i>An. lesteri</i>	15,405	40.27	38.00	9.15	12.58	78.27	0.029	-0.158
<i>An. liangshanensis</i>	15,475	40.12	38.03	9.20	12.65	78.15	0.027	-0.158
<i>An. peditaeniatus</i>	15,413	40.36	37.90	9.17	12.57	78.26	0.031	-0.157
<i>An. sinensis</i>	15,418	40.17	38.10	9.22	12.50	78.28	0.026	-0.151
<i>An. yatsushiroensis</i>	15,406	40.10	38.04	9.22	12.64	78.14	0.026	-0.157
PCGs								
<i>An. belenrae</i>	11,224	33.00	43.82	12.10	11.08	76.82	-0.141	0.044
<i>An. crawfordi</i>	11,224	33.11	43.82	12.07	11.00	76.92	-0.139	0.046
<i>An. junlianensis</i>	11,224	32.93	43.79	12.27	11.01	76.72	-0.142	0.054
<i>An. kleini</i>	11,224	32.96	43.95	12.13	10.97	76.91	-0.143	0.050
<i>An. kunmingensis</i>	11,224	32.89	43.80	12.26	11.05	76.69	-0.142	0.052
<i>An. lesteri</i>	11,224	32.98	43.79	12.23	10.99	76.77	-0.141	0.053
<i>An. liangshanensis</i>	11,224	32.76	43.76	12.33	11.15	76.52	-0.144	0.050
<i>An. peditaeniatus</i>	11,224	32.99	43.86	12.06	11.08	76.85	-0.141	0.042
<i>An. sinensis</i>	11,224	32.96	43.92	12.13	10.99	76.88	-0.143	0.050
<i>An. yatsushiroensis</i>	11,224	32.97	43.78	12.25	11.00	76.75	-0.141	0.054
tRNAs								
<i>An. belenrae</i>	1,476	39.50	38.82	12.47	9.21	78.32	0.009	0.150
<i>An. crawfordi</i>	1,476	39.36	38.82	12.40	9.42	78.18	0.007	0.137
<i>An. junlianensis</i>	1,475	39.46	38.85	12.41	9.29	78.31	0.008	0.144
<i>An. kleini</i>	1,475	39.39	38.71	12.54	9.36	78.10	0.009	0.146
<i>An. kunmingensis</i>	1,474	39.62	38.81	12.35	9.23	78.43	0.010	0.145
<i>An. lesteri</i>	1,476	39.50	38.69	12.40	9.42	78.18	0.010	0.137
<i>An. liangshanensis</i>	1,474	39.69	38.81	12.28	9.23	78.49	0.011	0.142
<i>An. peditaeniatus</i>	1,475	39.53	38.64	12.54	9.29	78.17	0.011	0.149
<i>An. sinensis</i>	1,476	39.43	38.75	12.53	9.28	78.18	0.009	0.149
<i>An. yatsushiroensis</i>	1,475	39.46	38.64	12.41	9.49	78.10	0.010	0.133
rRNAs								
<i>An. belenrae</i>	2,122	38.36	43.03	12.06	6.55	81.39	-0.057	0.296
<i>An. crawfordi</i>	2,123	38.72	43.05	11.73	6.50	81.77	-0.053	0.287
<i>An. junlianensis</i>	2,122	38.22	43.12	12.16	6.50	81.34	-0.060	0.303
<i>An. kleini</i>	2,122	38.36	42.98	12.06	6.60	81.34	-0.057	0.293
<i>An. kunmingensis</i>	2,122	38.45	42.98	12.02	6.55	81.43	-0.056	0.294
<i>An. lesteri</i>	2,123	38.62	43.01	11.82	6.55	81.63	-0.054	0.287
<i>An. liangshanensis</i>	2,123	38.34	43.10	12.01	6.55	81.44	-0.058	0.294

<i>An. peditaeniatus</i>	2,122	37.98	43.26	12.16	6.60	81.24	-0.065	0.296
<i>An. sinensis</i>	2,122	38.36	43.03	12.06	6.55	81.39	-0.057	0.296
<i>An. yatsushiroensis</i>	2,122	38.22	43.07	12.16	6.55	81.29	-0.060	0.300
