

(a)

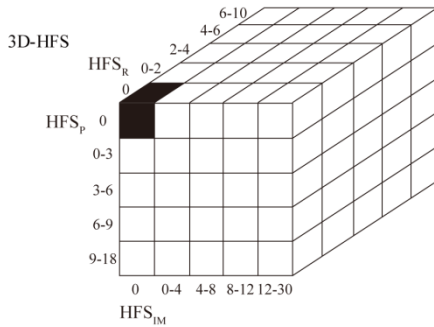
		SFS <sub>IM</sub>				
2D-SFS		0	0-4	4-8	8-12	12-30
SFS <sub>p</sub>	0	0	159	19	7	5
	0-3	17	12	1	1	3
	3-6	8	9	5	1	1
	6-9	5	2	7	1	2
	9-18	4	5	5	9	38

		HFS <sub>IM</sub>				
2D-HFS		0	0-4	4-8	8-12	12-30
HFS <sub>p</sub>	0	0	196	11	5	0
	0-3	41	16	6	2	0
	3-6	11	9	2	1	3
	6-9	1	8	2	3	2
	9-18	1	1	2	2	3

(b)

		0-4	4-8	8-12	12-16	16-30
SFS <sub>M</sub>		185	37	19	10	43
SFS <sub>p</sub>		34	24	17	28	37
SFS <sub>R</sub>		102	19	9	10	29

		6-10	0	0-4	4-8	8-12	12-30
HFS <sub>R</sub>		0	1	2	0	2	0
HFS <sub>p</sub>		0-3	1	0	0	0	0
HFS <sub>M</sub>		3-6	0	0	0	0	0
HFS <sub>p</sub>		6-9	0	0	0	0	0
HFS <sub>M</sub>		9-18	0	0	0	0	0



		4-6	0	0-4	4-8	8-12	12-30
HFS <sub>R</sub>		0	1	2	0	0	0
HFS <sub>p</sub>		0-3	0	0	1	1	0
HFS <sub>M</sub>		3-6	0	1	0	0	1
HFS <sub>p</sub>		6-9	0	0	0	0	0
HFS <sub>M</sub>		9-18	0	0	0	0	0

		2-4	0	0-4	4-8	8-12	12-30
HFS <sub>R</sub>		0	9	1	1	0	0
HFS <sub>p</sub>		0-3	1	1	0	2	0
HFS <sub>M</sub>		3-6	0	1	0	0	0
HFS <sub>p</sub>		6-9	0	0	0	0	0
HFS <sub>M</sub>		9-18	0	0	0	0	0

		0-2	0	0-4	4-8	8-12	12-30
HFS <sub>R</sub>		0	69	7	2	0	0
HFS <sub>p</sub>		0-3	1	0	2	0	0
HFS <sub>M</sub>		3-6	1	0	0	1	0
HFS <sub>p</sub>		6-9	0	1	0	0	2
HFS <sub>M</sub>		9-18	0	0	1	0	0

		0	0	0-4	4-8	8-12	12-30
HFS <sub>R</sub>		0	0	182	9	3	0
HFS <sub>p</sub>		0-3	37	16	2	0	1
HFS <sub>M</sub>		3-6	9	7	2	0	1
HFS <sub>p</sub>		6-9	2	7	2	3	0
HFS <sub>M</sub>		9-18	1	1	2	1	3

**Figure S1** Observed summary statistics for sequence data from (a) two populations (*M. fascicularis*) and (b) three populations (*M. mulatta* and *M. fascicularis*). (a) The data are summarized into 2D-SFS ( $5 \times 5$  bins excluding one bin with the frequency “0”) and 2D-HFS ( $5 \times 5$  bins excluding one bin with the frequency “0”). The frequencies of alleles or haplotypes are binned with “4” in the Indonesian-Malaysian population and “3” in the Philippine population. The 5th bins in SFS<sub>IM</sub> and HFS<sub>IM</sub>, or SFS<sub>p</sub> and HFS<sub>p</sub> are “12–30,” or “9–18,” respectively (b) The data from Burmese *M. mulatta* are added into those from the two populations. SFS<sub>R</sub> and HFS<sub>R</sub> are binned with “2,” and the 5th bins are “8–10” and “6–10.” 3D-HFS is represented as each section separated by the bin of HFS<sub>R</sub>.