

**Supplementary Table S3.** Hardy-Weinberg exact test at 20 simple sequence repeat loci in 12 populations of *Ascaris*

Locus	JX-H <sup>a</sup>	JX-P <sup>b</sup>	XJ-H	XJ-P	QH-H	QH-P	HN-H	HN-P	LN-H	LN-P	YN-H	YN-P
ALGA44	0.0073*	0.1396	0.0188*	0.5070	0.1920	0.1361	0.4512	0.0014*	0.0049*	0.0760	0.0812	0.0617
ALGA32	0.0000*	0.0001*	0.0000*	0.0007*	0.0000*	0.0439*	0.0315*	0.0193*	0.0000*	0.0950	0.0074*	0.0014*
ALGA31	0.0487*	0.0129*	0.0000*	0.0000*	0.6615	0.0078*	0.0883	0.0006*	0.1605	0.4345	0.0000*	0.0000*
ALGA20	0.0000*	0.0000*	0.0000*	0.0000*	0.0150*	0.0228*	0.0000*	0.0480*	0.0000*	0.5246	0.0000*	0.0000*
ALGA48	0.0000*	0.1965	0.1404	0.0000*	0.0021*	0.0108*	0.0439*	0.0082*	0.0134*	0.0003*	0.1248	0.0077*
ALGA15	0.0204*	0.2561	0.0000*	0.0132*	0.0000*	0.8902	0.0000*	0.0028*	0.0737	0.9330	0.9274	0.0000*
L001-est	0.0000*	0.0143*	0.0107*	0.0007*	0.0000*	0.0000*	0.0000*	0.0002*	0.0624	0.0000*	0.0003*	0.0000*
ALAC08	0.1173	0.8685	0.0011*	0.0000*	0.0000*	0.0001*	0.0000*	0.0007*	0.0000*	0.5502	0.4550	0.0000*
ALAC09	0.0030*	1.0000	0.7472	0.1036	0.5979	0.4574	0.0000*	0.1780	0.0000*	0.6259	0.1493	0.0238*
ALAC07	0.0357*	0.0014*	0.0000*	0.4102	0.0038*	0.0144*	0.0000*	0.0003*	0.0000*	0.0002*	0.0881	0.0007*
L007	0.0158*	-	1.0000	0.0862	1.0000	0.0544	0.0088*	0.0129*	0.0026*	1.0000	0.5477	0.0003*
L008	0.9556	0.4129	0.0310*	0.0288*	0.8758	0.0000*	0.0000*	0.1765	0.0021*	0.0277*	0.4577	0.0000*
ALTN02	0.0021*	0.0000*	0.0000*	0.0000*	0.0767	0.0000*	0.0000*	0.0000*	0.0000*	0.0000*	0.0000*	0.0000*
ALAC32	0.8492	0.2787	0.6952	0.2093	0.5180	0.0851	0.1063	0.0776	0.0000*	0.3334	0.9521	0.0750
L017-est	0.8141	0.5085	0.0258*	0.3784	0.0258*	1.0000	0.7146	0.1488	0.2104	0.3077	1.0000	0.0002*
L010	0.0000*	0.0275*	0.0000*	0.0119*	0.0000*	0.0000*	0.0000*	0.0000*	0.0000*	0.0200*	0.0000*	0.0000*
ALAC01	0.0000*	0.0303*	0.0000*	0.0059*	0.0000*	0.0054*	0.0000*	0.0000*	0.0000*	0.0000*	0.0000*	0.0000*
ALGA47	0.0000*	0.0158*	0.0195*	0.0359*	0.0000*	0.0019*	0.0823	0.0020*	0.0005*	0.0912	0.0000*	0.0000*
ALTN01	0.0829	0.7487	0.4877	0.8735	0.7729	0.1027	0.1883	0.0029*	0.6467	0.7381	0.7758	0.1127
ALTN04	0.0393*	0.5054	0.5174	0.1853	0.8413	0.1462	0.0653	0.0397*	0.0068*	0.0136*	0.0000*	0.4581

JX, Jiangxi; XJ, Xinjiang; QH, Qinghai; HN, Hainan; LN, Liaoning; YN, Yunnan.

<sup>a</sup>H, Human *Ascaris*.

<sup>b</sup>P, Pig *Ascaris*.

\* $P < 0.05$ .

**Supplementary Table S4.** Table Hardy-Weinberg exact tests for each population

Population	P-value	S.E.
JX-H <sup>a</sup>	0.0000	0.0000
JX-P <sup>b</sup>	0.0000	0.0000
XJ-H	0.0000	0.0000
XJ-P	0.0000	0.0000
QH-H	0.0000	0.0000
QH-P	0.0000	0.0000
HN-H	0.0000	0.0000
HN-P	0.0000	0.0000
LN-H	0.0000	0.0000
LN-P	0.0000	0.0000
YN-H	0.0000	0.0000
YN-P	0.0000	0.0000

JX, Jiangxi; XJ, Xinjiang; QH, Qinghai; HN, Hainan; LN, Liaoning; YN, Yunnan.

<sup>a</sup>H, Human *Ascaris*.

<sup>b</sup>P, Pig *Ascaris*.

**Supplementary Table S5.** Proportion of membership coefficients with K=3 in each population

Population	Red	Green	Blue
JX-H <sup>a</sup>	0.395	0.066	0.539
JX-P <sup>b</sup>	0.062	0.915	0.023
XJ-H	0.600	0.133	0.267
XJ-P	0.018	0.928	0.054
QH-H	0.291	0.485	0.224
QH-P	0.060	0.872	0.068
HN-H	0.189	0.038	0.773
HN-P	0.227	0.429	0.344
LN-H	0.451	0.021	0.528
LN-P	0.132	0.800	0.068
YN-H	0.509	0.054	0.437
YN-P	0.577	0.107	0.316

JX, Jiangxi; XJ, Xinjiang; QH, Qinghai; HN, Hainan; LN, Liaoning; YN, Yunnan.

<sup>a</sup>H, Human *Ascaris*.

<sup>b</sup>P, Pig *Ascaris*.