

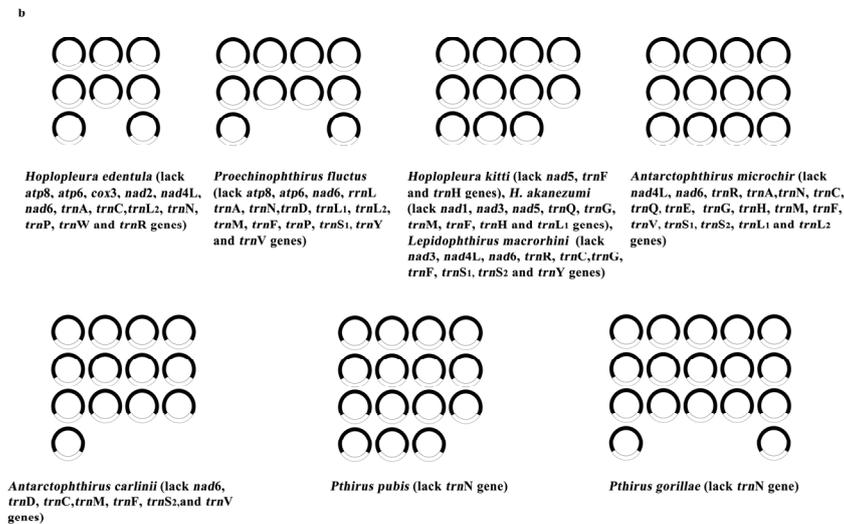
# Supplementary Materials

Table S1

PCR primers used to amplify and sequence the mitochondrial genome of the buffalo louse, *Haematopinus tuberculatus*.

Primer	Sequence (5' to 3')	Minichromosome
<i>nad4F</i>	TATTGGGGTTGTGGGTGCTTGTT	K- <i>nad4-atp8-atp6-N</i>
<i>nad4R</i>	AACAAGCACCCACAACCCCAATA	K- <i>nad4-atp8-atp6-N</i>
<i>cytbF</i>	TCCTCCACACATCCAACCTGAAT	E- <i>cytb-V</i>
<i>cytbR</i>	ATTCAGGTTGGATGTGTGGAGGA	E- <i>cytb-V</i>
<i>cox1F</i>	TTACCTGGATTTGGCTTGATTTC	<i>nad2-I-cox1-L2</i>
<i>cox1R</i>	GAGAAATCAAGCCAAATCCAGGT	<i>nad2-I-cox1-L2</i>
<i>cox2F</i>	GAGACGCAATTCCTGGACGACTTAA	D-Y- <i>cox2-S1-S2-P-cox3-A</i>
<i>cox2R</i>	AGAAGGGATAGTCCAAGAATGAATG	D-Y- <i>cox2-S1-S2-P-cox3-A</i>
<i>nad1F</i>	AAGTAGTTGCTAAGGTTGGGT	Q(-)- <i>nad1(-)-T(-)-G-nad3-W</i>
<i>nad1R</i>	ACTAATAGCCCTTCCTAACAT	Q(-)- <i>nad1(-)-T(-)-G-nad3-W</i>
<i>nad4LF</i>	TGGTATTAGAGGGAAGTTTAGGG	R- <i>nad4L</i>
<i>nad4LR</i>	AGTCAACCCTAAACTTCCCTCTA	R- <i>nad4L</i>
<i>nad5F</i>	GTATTACAGCCTTAGGGGAGT	H- <i>nad5-F-nad6</i>
<i>nad5R</i>	AGGTAATCAAGAACAGAAAGG	H- <i>nad5-F-nad6</i>
<i>rrnSF</i>	AGTCTGGATAAGTCGTAACAAAG	<i>rrnS-C</i>
<i>rrnSR</i>	CTTTGTTACGACTTATCCAGACT	<i>rrnS-C</i>
<i>rrnLF</i>	GAATGAACGGTCTAACAAAAGTA	L1- <i>rrnL</i>
<i>rrnLR</i>	ATCACAAGCATTGAGCAGGTCGT	L1- <i>rrnL</i>
MF	ACCACAGAAATAAAGGAAGAAGG	M
MR	ATCCTTCTTCCTTTATTTCTGTG	M

Figure S1 Numbers of fragmented mitochondrial minichromosomes of nine sucking lice with at least one unidentified gene in their mt genomes.



**Figure S2** PCR verification of the ten mt minichromosomes of the buffalo louse, *Haematopinus tuberculatus*. Lane M: DL5000 DNA marker; Lane 1–10: *trnK-nad4-atp8-atp6-trnN*, *trnE-cytb-trnV*, *nad2-trnI-cox1-trnL2*, *trnD-trnY-cox2-trnS1-trnS2-trnP-cox3-trnA*, *trnQ (-) -nad1 (-) -trnT (-) -trnG-nad3-trnW*, *trnR-nad4L*, *trnH-nad5-trnF-nad6*, *rrnS-trnC*, *trnL1-rrnL*, *trnM*.

