

Additional file 2 PCR primers used to verify each mitochondrial minichromosome of the house louse, *Haematopinus asini*

Primer	Sequence (5' to 3')	Target gene
nad4f	GATAGACAATACTTATTGGGGCACGTTTCGCA	<i>nad4</i>
nad4r	GCAGACTCCGCTATTATTTAGTCTCACAACC	<i>nad4</i>
nad2f	TATGGAAAGTTAGGTAGTCTAGGGT	<i>nad2</i>
nad2r	GAAAGAAGTTAACTCCATACCGAAC	<i>nad2</i>
cox2f	TGAAGAGAGATGCTATTCCGGGTCG	<i>cox2</i>
cox2r	AATCACATCCGAAGAAGTAACTAACAGCCGAA	<i>cox2</i>
cobf	TAACGGCTTGAATTTGAGGTGGGT	<i>cob</i>
cobr	ATGCGCCTCAGTACGGTAAAGC	<i>cob</i>
nad3f	ATATGAGGCTCACTAGATTGGGACAAA	<i>nad3</i>
nad3r	TGCCCACGAAAAGGATCAATCTGTAGA	<i>nad3</i>
nad5f	GGAGGACTAGTATAGAACTATGTCTTTGGGAGG	<i>nad5</i>
nad5r	GGAGACTACTAGCAATGGGAATTTGGAGAC	<i>nad5</i>
metf	CATACTCTAACGAAATGTAACACATTTTGCTTCAA	<i>trnM</i>
metr	AAGGCTTAAGTTATAGCCTATTTGCTCGA	<i>trnM</i>
trnlf	GGATTTAGGATTCAAATATGATGTTTATCTTCAC	<i>trnL1</i>
trnlr	ATTCTGCCAACCTAACTTATATGGAAAC	<i>trnL1</i>
12sf	AGAGTATGGCGGTCAATATCCTGATCAGAGACTC	<i>rrnS</i>
12sr	TGGAGTAACCCAATACTTCCTTGGTTTAGGGGCA	<i>rrnS</i>

Note: Abbreviations of gene names are: *nad2-5* for NADH dehydrogenase subunits 2-5; *cox2* for cytochrome c oxidase subunits 2; *cob* for cytochrome b; and *rrnS* for small ribosome RNA subunits. tRNA genes are labeled with the single-letter abbreviations of their corresponding amino acids.