

**Table S2 Primers used for PCR and sequencing**

Target gene	Primer name	Sequence (5' to 3')	Purpose
CG5924 (Twinkle)	CG5924 left	GCATCGTAGTGCAACCAAAA	Q-RT-PCR
	CG5924 right	CCAAAGCGGTTCTAGTCAGC	
mtTFB2	mtTFB2 left	CAGGATCTACCCGCTCTCTG	Q-RT-PCR
	mtTFB2 right	AGATGGGTGTTACGGACTCG	
tamas (Polg)	tamas left	AATCTCTCCAGGCGATTGA	Q-RT-PCR
	tamas right	CAAAGGGCAAGCGAGTGTA	
Tfam	Tfam left	GGCTCAGGTGGATCGATAAG	Q-RT-PCR
	Tfam right	GAGTGGCACCAAAAGACCAC	
mTTF	mTTF left	AGTTCAGAGCACCCACCAGT	Q-RT-PCR
	mTTF right	ACTGCAGCTAGAGGGCGTTA	
mTerf3	mTerf3 left	CGTCCCGCAGTCTAAATTC	Q-RT-PCR
	mTerf3 right	CGTCCCGCAGTCTAAATTC	
CG8798 (Lon)	CG8798 left	GTTTCAGTGGCCTTCTCCAG	Q-RT-PCR
	CG8798 right	AAAGTACCGCGAAAAGCTGA	
belphegor	Belphegor-F	GCCTCTTGCGCTTGACT	Q-RT-PCR
	Belphegor-R	TTCGAACACGTCTTTCCG	
Ets97D	Delg-F	TGATGGATTCATGGATGACG	Q-RT-PCR
	Delg-R	AGAATCATGTCCGCCAATTC	
Spargel	Sparg-F	CCTCGACTACATTCCGGTGCT	Q-RT-PCR
	Sparg-R	AGACGTGCCTTCTGTCTTC	

LSU rRNA	16S-L	TGGCCGCAGTATTTGACTG	Q-RT-PCR
	16S-R	TCGTCCAACCATTCAATCCA	
SSU rRNA	12S-L	AAAAATTTGGCGGTATTTAGTCT	Q-RT-PCR
	12S-R	AAGGTCCATCGTGGATTATCG	
RpL32	Rp49-f	AGCATACAGGCCCAAGATCGTGAA	Q-RT-PCR
	Rp49-r	CACGTTGTGCACCAGGAACCTCT	
mtDNA	DsmtD1s	GTTTTCTGCATTCATTGACTGATTTATA	PCR of coding region (CR) fragment 1
	DsmtD1as	TTTGACATTGAAGATGTTATGGAGATTA	
	DsmtD2s	GAGAAGGAACATACCAAGGATTACATAC	PCR of coding region (CR) fragment 2
	DsmtD2as	GAGTTAAAGTGGCATTATCAACAGCAAA	
	DsmtD3s	TCCGATTAGAAACAAAACAAATAGCCC	PCR of coding region (CR) fragment 3
	DsmtD3as	AAAGTATTGACTAAATTGGTGCCAGCAG	
	DsmtD4s	ATCTTACCTTAATAATAAGAGCGACGGG	PCR of NCR containing fragment
	DsmtD4as	TTAGGAAATC AAAAATGGAA AGGAGCGG	
	Dm189F	AGCTACTGGGTTTCATACCCC	Sequencing of CR fragment 1
	Dm710F	GGTATTATTGGAGCTATTGGAGG	Sequencing of CR fragment 1
	Dm994R	GGAGGTAATCCTCCTAATGATAA	Sequencing of CR fragment 1
	Dm1274F	GTTAATAAAACTAATAACCTTCAAAGC	Sequencing of CR fragment 1
	Dm1480R	GTCGCGATTATTGATTAAGTG	Sequencing of CR fragment 1
	Dm1777R	GTCAAAATCTTATATTATTTATTCGTG	Sequencing of CR fragment 1
	Dm1825F	AATGGAGCTGGAACAGGATG	Sequencing of CR fragment 1
	Dm2079R	TCCTGCTAGTACTGGAAGTG	Sequencing of CR fragment 1
	Dm2371F	CGAGCTTATTTACCTCAGC	Sequencing of CR fragment 1
	Dm2659R	GGTATCAGTGAATAAAACCTGC	Sequencing of CR fragment 1
	Dm2896F	GTATCACAACGACAAGTAATTTACC	Sequencing of CR fragment 1
	Dm3125R	GAGAAGCTCTATCTTGTAACC	Sequencing of CR fragment 1

Dm3277F	AACTATTTTACCAGCAATTATTTTACT	Sequencing of CR fragment 1
Dm3524R	AGTTTATAGGTAAAATACTCGG	Sequencing of CR fragment 1
Dm3778F	CTGAAAGCAAGTACTGGTCTC	Sequencing of CR fragment 1
Dm3780R	CAGTCATCTAATGAAGAGTTATTCTA	Sequencing of CR fragment 1
Dm4100R	AGCTAAGGGGTCTGAATACAG	Sequencing of CR fragment 1
Dm4244F	AGGACCATCAGGTCATAATGG	Sequencing of CR fragment 1
Dm4467R	CGGGTGTTTCCTTGAGGAAC	Sequencing of CR fragment 1
Dm4743F	CACACTCAAATCACCTTTCC	Sequencing of CR fragment 1
Dm5064R	GCGGGTGATAAACTTCTGTG	Sequencing of CR fragment 1
Dm5289F	CTCCATTACTATTGCAGACTC	Sequencing of CR fragment 1
Dm5521R	TCCTCCTCATCAGTAAATTGTG	Sequencing of CR fragment 1
Dm5740F	CCAAAATCTTCATCTCGATTACC	Sequencing of CR fragment 1
Dm6074R	CAATCAATCGCTTCATATTCAG	Sequencing of CR fragment 1
Dm5314F	ACTGTAACCTGAGCCCACCA	Sequencing of CR fragment 2
Dm6005F	TTGATTGCAATTAGTTTCGACCT	Sequencing of CR fragment 2
Dm6195R	CATTAACAGTGATACGCCTC	Sequencing of CR fragment 2
Dm6801F	AAATCAATCAATTTAATATTCTACCTC	Sequencing of CR fragment 2
Dm6928R	CGGTGATTTAAATTGCGGTAG	Sequencing of CR fragment 2
Dm7191F	GCCCCAGCACATATAAAACAA	Sequencing of CR fragment 2
Dm7378R	ATTAACAATATTTATAGCTGGATTAGG	Sequencing of CR fragment 2
Dm7771F	AAACAAGTCCTAAACCATCTCACC	Sequencing of CR fragment 2
Dm8181R	AATTTGTGGTGTTAGTGATATGAAAA	Sequencing of CR fragment 2
Dm8740F	TGAGCAACAGATGAATAAGCAA	Sequencing of CR fragment 2
Dm8762R	TTGCTTATTCATCTGTTGCTCA	Sequencing of CR fragment 2
Dm9363F	AATCCATAAGATAATATATCACAACT	Sequencing of CR fragment 2
Dm9623R	ATGTGAAGGGGCCTTAGGTT	Sequencing of CR fragment 2

Dm9888R	ATAATCTATTTTTGATTTACAAGACC	Sequencing of CR fragment 2
Dm10196R	TCATTAGAGGCTAAAGATGTTAC	Sequencing of CR fragment 2
Dm10525R	TGGGAATTCGTAAGGTTTATTC	Sequencing of CR fragment 2
Dm9858F	CATTGGTCTGTAAATCAAAAATAAG	Sequencing of CR fragment 3
Dm10196R	TCATTAGAGGCTAAAGATGTTAC	Sequencing of CR fragment 3
Dm10465F	TTTAAAGGACCTATTCTGAATAATATC	Sequencing of CR fragment 3
Dm10725R	ATAATTAACGTCTCGACAAATATG	Sequencing of CR fragment 3
Dm10950F	ATACGCTATCCCTTACTTAGG	Sequencing of CR fragment 3
Dm11258R	GGGTCTCCAATAAATTTGGTC	Sequencing of CR fragment 3
Dm11425F	TTAAGAAAATTCGAGGGATTC	Sequencing of CR fragment 3
Dm11845R	GGAACCTTACCTCGATTTCG	Sequencing of CR fragment 3
Dm12075F	GCTAATGAAATAGATACTCAAATAAA	Sequencing of CR fragment 3
Dm12244R	GCTGTGGCTCAGACTATTTTC	Sequencing of CR fragment 3
Dm12492F	GCATCACAAAAGGTTGAGG	Sequencing of CR fragment 3
Dm12584R	TTTATTAGAACGAAAAGTTTTAGGATA	Sequencing of CR fragment 3
Dm12734R	AACTATTTTGGCAGATTAGTGC	Sequencing of CR fragment 3
Dm12976F	CGCTGTTATCCCTAAAGTAAC	Sequencing of CR fragment 3
Dm13172R	AGACGAGAAGACCCTATAAATC	Sequencing of CR fragment 3
Dm13390F	GGCGAATATTATTTTGCCG	Sequencing of CR fragment 3
Dm13661R	ATAATTTTAATGTTTTATGGGATAAGC	Sequencing of CR fragment 3
Dm13852F	TATTTAATAAACACTGATACACAAGGT	Sequencing of CR fragment 3
Dm14152R	CTGGAAAGTGTATCTAGAATGAC	Sequencing of CR fragment 3
Dm14332F	AATATAAGCTACACCTTGATCTG	Sequencing of CR fragment 3
Dm14366R	AAAAATTTATATCAGATCAAGGTGTAG	Sequencing of CR fragment 3
Dm14502R	CGGTATTTTAGTCTATCTAGAGG	Sequencing of CR fragment 3
Dm14428F	TGATTACAAATTTAAGTAAGGTCCATCG	PCR and sequencing of 'left' end of

		NCR and of adjacent CR segment
Dm14570F	AGGGTATCTAATCCTAGTTT	Sequencing of 'left' end of NCR and of adjacent CR segment
Dm14721F	AATGGTATAACCGCGACTGC	Sequencing of 'left' end of NCR and of adjacent CR segment; PCR of NCR repeat array I
Dm14787R	CCAAATTGGTGCCAGCAGTCGCGG	Sequencing of 'left' end of NCR and of adjacent CR segment
Dm15285F	AAAAAATTATAGATTAATTTCTTTTAAATGAC	Sequencing of 'left' end of NCR and start of repeat array I
Dm15578F	CGAATAATAAATAATAAATAATTTATTTTAATCACTAAATCTG	PCR of NCR repeat arrays I and II and region between them
Dm17295R	GAATAGATTTTATTTAAT	PCR of NCR repeat array I; sequencing of region between repeat arrays I and II
Dm17556F	GTATTATTTTATAAAAAATATTTATATAATAAAATCATG	PCR and sequencing of NCR repeat array II

Dm17556R	CATGATTTTATTATATAAAATATTTTTTATAAAAAATAATAC	PCR of NCR repeat array I; PCR and sequencing of region between repeat arrays I and II
Dm17717F	ACTATATACTAATTATAAATTAATAG	PCR and sequencing of NCR repeat array II
Dm17833R	GAGAATATAAAATTTTTATAAATTATATC	PCR and sequencing of NCR repeat array II and region between repeat arrays I and II
Dm18026R	ATAATACATTTAAGAAATTTTTAAAAAATTTATATT	PCR and sequencing of NCR repeat array II
Dm18933F	AAAATTTCTTAATGTATTATTTAATAAAAAATTACTTTTTAA	PCR of repeat array II, 'right' end of NCR and adjacent CR segment; sequencing of NCR repeat array II
Dm31R	CATGATTTACCCTATC	Sequencing of NCR repeat array II and 'right' end of NCR

	Dm225R	TATAACCTTTATAAATGGGGTATGAACCCAGTAG	PCR of whole NCR and of repeat array II Sequencing of NCR repeat array II, 'right' end of NCR and adjacent CR segment
Wolbachia 16S rRNA	w-16SF	TTGTAGCCTGCTATGGTATAACT	PCR of <i>Wolbachia</i> genomic DNA for detection assay
	w-16sR	GAATAGGTATGATTTTCATGT	
Universal 16S rRNA (bacterial)	Eub-16SF	GCTTAACACATGCAAG	PCR of bacterial genomic DNA for detection assay
	Eub-16SR	CCATTGTAGCACGTGT	
LSU rRNA (mt)	mt 16S-F	TTCGTCCAACCATTTCATTCC	Q-PCR for copy number assay
	mt 16S -R	TTTGTCTAACCTGCCCACTGA	
18S rRNA (nuclear)	18S-F	TTGCGAAACAACCGTAACAC	Q-PCR for copy number assay
	18S-R	GGTAAACCGCTGAACCACTT	

All sequences are shown 5' to 3'