

Additional file 10. Gene-specific primers used for the analysis of expression levels of chloroplast genes by quantitative RT-PCR

Gene	Primers (5' to 3')
accD	Forward : GGTTC AATTTTATGTTTCTAAGG Reverse : GCATGGAGCTGAAATAACTCG
atpA	Forward : CCATTAGAGCCGACGAAATTAG Reverse : AGTAGGAAACGTTCTAGTTGCTC
atpB	Forward : ATCCTACTACTTCAAATCCAGAGG Reverse : ATTTCTTCAATTTACTCTCCATTTC
atpH	Forward : ATGAATCCACTGGTTTCTGCTG Reverse : AAAAGGATTTCGCAAATAAAAGC
atpI	Forward : AATGTTTTATCATGTTCCATCAAC Reverse : TTAATGATGACCTTCCATAGACTC
matK	Forward : AAGAAAATAAAGACTTTACCTTCAG Reverse : ATCCAAATACCAAATTCGCACTC
ndhC	Forward : ATGTTTCTGCTTTACGAATATGA Reverse : CTAAGACCATTCCAATGCTCC
ndhD	Forward : GCTGGTTCATTAATGTTATTTCTC Reverse : GGATTTCGACCTTGTCACTTGC
ndhE	Forward : ATACTCGAACATGTACTTGTTTTGAG Reverse : TTACTTATTTAATAAGGTCGATTGG
ndhF	Forward : ATATTCATGGATCATCCCTTTC Reverse : AAGAACAGATAAGAAGAGATGCG
ndhG	Forward : ATGGATTTGCCTGGACCAATAC Reverse : TATTGACGAGCCACAGAAATTG
ndhH	Forward : GAGACCAGTTACAGGAAAAGATC Reverse : TTAACGATCAACTTCTCCCATATA
ndhI	Forward : ATGCTTCCTATGATAACCGGG Reverse : TCAAATTAAGGGTTTACCCC
ndhJ	Forward : CACTTTGTCCGTTTGGCTAG Reverse : CATCTTGATTTTCATAAAAATTGG
ORF77	Forward : ATGCTACTACTGAAACATGGAAGA Reverse : GTTATTCAGTTGATTTCGTTATTGG
petA	Forward : ATGCAAAC TAGAAATACCTTTTC Reverse : CTAAAAATTCATTTCCGATAATTG
petG	Forward : ATGATTGAAGTTTTTTTATTG Reverse : TTAAAAGTCCAACTGATCACCAC
psaA	Forward : GATTATTCGTTTCGCCGGAAC Reverse : AGAAGAACGCCCATGTTGTG
psaB	Forward : ATGGCATT AAGATTTCCAAGG Reverse : TTAACCGAATTTGCCCGATG
psaC	Forward : ATGTCACATTCAGTAAAAATTTATG Reverse : TCAATAAGCTAGACCCATACTTC
psaI	Forward : ATGACA ACTTTCAATAACTTACCC Reverse : TCTTATTTTTTTGAATATGAAGAAA
psaJ	Forward : ATGCGAGATCTAAAAACATATC Reverse : TAGAATGAAAAAAGGGAAATG
psbA	Forward : ATGACTGCAATTTTAGAGAGACG Reverse : TAGATGGAGCCTCAACAGCAG
psbB	Forward : ATGGGTTTGCCTTGGTATCG

psbC	Reverse : TCAGACTGCTTGTCTGTTTTGTAG Forward : ATGAAAACCTTATATTCCCTGAGG
psbD	Reverse : AGTTAAGAGGAGTCATGGAAAGAAC Forward : ACTATAGCCCTTGGTAAATTTACC
psbE	Reverse : AAAGAGCGTTTCCACGTGGTAG Forward : ATGTCTGGAAGCACAGGAGAAC
psbF	Reverse : CTAAATTCATCGAGTTGTTCCAAAG Forward : ATGACTATAGATAGGACCTATCCAA
psbG	Reverse : TATCGTTGGATGAACTGCATTG Forward : GAATTCCATTAAAGTTTCCCATAC
psbH	Reverse : CTAATTCACTAATTCGTGGGACG Forward : ATGGCTACACAACTGTTGAAG
psbI	Reverse : CTAATTCACTGAAATTCCATCC Forward : ATGCTTACTCTCAAACTTTTTG
psbJ	Reverse : ATTCTTCACGTCCCGGATTAC Forward : ATGGCTGATACTACTGGAAGGA
psbK	Reverse : CTACAGGGATGAACCTAATCCTG Forward : ATGCTTAATATATTTAATTTGATCTG
psbL	Reverse : TTATCGAAAACCTACAGCGGC Forward : ATGACACAATCAAATCCGAACG
psbM	Reverse : TTAATTGAAGAAATAATTCGAAAATA Forward : ATGGAAGTAAATATTCTTGCA
psbT	Reverse : TTAATCATTTTGACTAACGG Forward : ATGGAAGCATTGGTTTATACATTTT
rbcl	Reverse : TCATTTTTTAGTTGAAATTTTAGG Forward : TCACCACAAACAGAGACTAAAGC
rpl4	Reverse : ACTCTTGCCATCTAATTTATCG Forward : AAACCTATTTGAATGTAGCAGAC
rpl18	Reverse : TTATAATACCTCAGGAGCTAATGA Forward : GAATAAATCTAAGCGACTTTTTAC
rpl20	Reverse : TATTTTTTTCTGGTTCTAAGACTAG Forward : ATGACTAGAATTAAACGCGGA
rpl22	Reverse : TTATGTCATTTCGAAATTGTATAAAG Forward : AGAGAAAAAAGAAATCATATACGG
rpl23	Reverse : TATTTTTTTGTCCCATAGGCCTC Forward : ATGGATGGAATCAAATATGCAG
rpl32	Reverse : GTTCTTTTCTTTCTAAGAGGTGG Forward : GGCAGTTCCAAAAAACGTAC
rpl33	Reverse : AAAAATTTTTGAATTACCTGTAG Forward : ATGGCCAAGGGTAAAGATGTTC
rpoA	Reverse : CTATTTCTTGATTTCCCCGTG Forward : ATGGTTCGAGAGAAAGTCAAAG
rps2	Reverse : CTAATATCTTTTTTACATCTTCTACG Forward : ATGACAAAAAGATATTGGAACATCG
rps3	Reverse : GTATATAGCTAGAACGGCCCTCAC Forward : ATGGGACAAAAAATAAATCCAC
rps4	Reverse : CGTCTACGAATATCCAAATTTTTA Forward : ATGTCACGTTACCGAGGGCC
rps7	Reverse : TCGAGAGTAATATTCTACGACAAGC Forward : ATGTCACGCCGAGGTACTGC
rps8	Reverse : TTAACGAAAATGTGCAAAAGCTC Forward : GGGGAAAGACACCATTGCTG
rps11	Reverse : CCATATATAACACAAAATTTCTCCG Forward : ATGGCAAACCTATATTAAGAATTG

rps14	Reverse : CTATACACGTCTTTTTTTTAGGGG Forward : ATGGCAAAGAAAAGTTTGATTTA Reverse : TTACCAGCTTGATCTTGTTGC
rps15	Forward : GATAAAAAATATAGTCATTTCAATTG Reverse : GTTTTAAATTCCCGAATATTCAAC
rps19	Forward : GTGACACGTTCCTAAAAAAAAC Reverse : CGACGAGATCTATTATCATTTTTG
ycf1	Forward : ATGGTTTTTCAATCTTTTATACTAGG Reverse : CTAAATTCGAATTTTCTTTATTTC
ycf4	Forward : ATGAGTTGGCGATCAGAATCTA Reverse : TCAAAATACTTCAATTGGTACACG
ycf5	Forward : ATGATTTTTTCAATTTTAGAGCA Reverse : AATTCGATGTAAATGAACCATAAC
ycf9	Forward : ATGACTATTGCTTTCCAATTGG Reverse : AGAGATAAGAGAATTAAGGATACCC
