

Table S2. List of genes encoded by *Bougainvillea* chloroplast genomes

Gene category	Gene names
ATP Synthase	<i>atpA, atpB, atpE, atpF*</i> , <i>atpH, atpI</i>
NADH dehydrogenase	<i>ndhA*</i> , <i>ndhB^{(X2)*}</i> , <i>ndhC, ndhD, ndhE, ndhF, ndhG, ndhH, ndhI, ndhJ, ndhK</i>
Cytochrome b/f complex	<i>petA, petB*</i> , <i>petD*</i> , <i>petG, petL, petN</i>
Photosystem I	<i>psaA, psaB, psaC, psaI, psaJ</i>
Photosystem II	<i>psbA, psbB, psbC, psbD, psbE, psbF, psbH, psbI, psbJ, psbK, psbL, psbM, psbN, psbT, psbZ</i>
RubisCO large subunit	<i>rbcL</i>
Ribosomal protein genes (large subunits)	<i>rpl2^{(x2)*}</i> , <i>rpl14, rpl16*</i> , <i>rpl20, rpl22, rpl23^(x2)</i> , <i>rpl32, rpl33, rpl36</i>
Ribosomal protein genes (small subunits)	<i>rps2, rps3, rps4, rps7^(x2)</i> , <i>rps8, rps11, rps12^{(x2)#}</i> , <i>rps14, rps15, rps16*</i> , <i>rps18, rps19</i>
RNA Polymerase	<i>rpoA, rpoB, rpoC1*</i> , <i>rpoC2</i>
Ribosomal RNA genes	<i>rrn4.5^(X2)</i> , <i>rrn5^(X2)</i> , <i>rrn16^(X2)</i> , <i>rrn23^(X2)</i>
Transfer RNA genes	<i>trnI-CAU^(x2)</i> , <i>trnL-CAA^(x2)</i> , <i>trnV-GAC^(x2)</i> , <i>trnI-GAU^{(x2)*}</i> , <i>trnA-UGC^{(x2)*}</i> , <i>trnR-ACG^(x2)</i> , <i>trnN-GUU^(x2)</i> , <i>trnL-UAG, trnP-UGG, trnW-CCA, trnM-CAU, trnV-UAC*</i> , <i>trnF-GAA, trnL-UAA*</i> , <i>trnT-UGU, trnS-GGA, trnM-CAU, trnG-GCC, trnS-UGA, trnT-GGU, trnE-UUC, trnY-GUA, trnD-GUC, trnC-GCA, trnR-UCU, trnG-UCC*</i> , <i>trnS-GCU, trnQ-UUG, trnK-UUU*</i> , <i>trnH-GUG</i>
ATP-dependent protease	<i>clpP**</i>
Maturase	<i>matK</i>
Hypothetical chloroplast reading frames	<i>ycf1^(x2)</i> , <i>ycf2^(x2)</i> , <i>ycf3**</i> , <i>ycf4</i>
Acetyl-CoA carboxylase	<i>accD</i>
C-type cytochrome synthesis gene	<i>ccsA</i>
Envelope membrane protein	<i>cemA</i>
Translational initiation factor	<i>infA</i>

*genes with intron

#trans-spliced gene