

Table S2. Genes encoded in the *Catharanthus roseus* plastome.

Functional category	Group of genes	Gene name
Self-replication	rRNA genes	<i>rrn16^c, rrn23^c, rrn4.5^c, rrn5^c,</i>
	tRNA genes	<i>trnA-UGC^{a,c}, trnC-GCA, trnD-GUC, trnE-UUC, trnF-GAA, trnG-GCC, trnG-UCC^a, trnH-GUG, trnI-CAU^c, trnI-GAU^{a,c}, trnK-UUU^a, trnL-CAA^c, trnL-UAA^a, trnL-UAG, trnM-CAU, trnM-CAU, trnN-GUU^c, trnP-UGG, trnQ-UUG, trnR-ACG^c, trnR-UCU, trnS-GCU, trnS-GGA, trnS-UGA, trnT-GGU, trnT-UGU, trnV-GAC^c, trnV-UAC^a, trnW- CCA, trnY-GUA</i>
	Ribosomal small subunit	<i>rps2, rps3, rps4, rps7^c, rps8, rps11, rps12_5'end, rps12_3'end^{a,c}, rps14, rps15, rps16^a, rps18, rps19</i>
	Ribosomal large subunit	<i>rpl2^{a,c}, rpl14, rpl16^a, rpl20, rpl22, rpl23^c, rpl32, rpl33, rpl36</i>
	DNA-dependent RNA polymerase	<i>rpoA, rpoB, rpoC1^a, rpoC2</i>
Photosynthesis	Large subunit of rubisco	<i>rbcL</i>
	Photosystem I	<i>psaA, psaB, psaC, psal, psaj, ycf3^b</i>
	Photosystem II	<i>psbA, psbB, psbC, psbD, psbE, psbF, psbH, psbl, psbj, psbk, psbl, psbm, psbn, psbt, psbZ</i>
	NADH dehydrogenase	<i>ndhA^a, ndhB^{a,c}, ndhC, ndhD, ndhE, ndhF, ndhG, ndhH, ndhI, ndhJ, ndhK</i>
	Cytochrome b/f complex	<i>petA, petB^a, petD^a, petG, petL, petN</i>
	ATP synthase	<i>atpA, atpB, atpE, atpF^a, atpH, atpI</i>
	Other	
	Maturase	<i>matK</i>
	Subunit of acetyl-CoA carboxylase	<i>accD</i>
	Envelope membrane protein	<i>cemA</i>
	Protease	<i>clpP^b</i>
	Translational initiation factor	<i>infA</i>
	c-type cytochrome synthesis	<i>ccsA</i>
Functions unknown	Conserved open reading frames (<i>ycf</i>)	<i>ycf1, ycf2^c, ycf4, ycf15^c</i>

^a containing one intron.^b containing two introns.^c genes in the IR regions (i.e., have two copies in the plastome).