

S2 Table. Genes encoded in the *Lathraea squamaria* and *Lindenbergia philippensis* plastomes.

^a containing one intron, ^b containing two introns, ^c genes in the IR regions (i.e., duplicated),
*pseudogenes

Functional category	Group of genes	<i>Lathraea squamaria</i>	<i>Lindenbergia philippensis</i>
Protein synthesis and DNA-replication	rRNA genes	<i>rrn16^c, rrn23^c, rrn4.5^c, rrn5^c</i>	<i>rrn16^c, rrn23^c, rrn4.5^c, rrn5^c,</i>
	tRNA genes	<i>trnA-UGC^{ac}, trnC-GCA, trnD-GUC, trnE-UUC, trnH-GUG, trnF-GAA, trnG-GCC, trnG-UCC^a, trnI-GAU^{ac}, trnI-CAU^c, trnK-UUU^a, trnL-CAA^c, trnL-UAA^a, trnL-UAG, trnfM-CAU, trnM-CAU, trnN-GUU^c, trnP-UGG, trnQ-UUG, trnR-ACG^c, trnR-UCU, trnS-GCU, trnS-GGA, trnS-GCU, trnT-GGU, trnT-UGU, trnV-GAC^c, trnV-UAC, trnW-CCA, trnY-GUA</i>	<i>trnA-UGC^{ac}, trnC-GCA, trnD-GUC, trnE-UUC, trnH-GUG, trnF-GAA, trnG-GCC, trnG-UCC^a, trnI-GAU^{ac}, trnI-CAU^c, trnK-UUU^a, trnL-CAA^c, trnL-UAA^a, trnL-UAG, trnfM-CAU, trnM-CAU, trnN-GUU^c, trnP-UGG, trnQ-UUG, trnR-ACG^c, trnR-UCU, trnS-GCU, trnS-GGA, trnS-GCU, trnT-GGU, trnT-UGU, trnV-GAC^c, trnV-UAC, trnW-CCA, trnY-GUA</i>
	Ribosomal small subunit	<i>rps2, rps3, rps4, rps7^c, rps8, rps11, rps12_5'end, rps12_3'end^{ac}, rps14, rps15, rps16^a, rps18, rps19*</i>	<i>rps2, rps3, rps4, rps7^c, rps8, rps11, rps12_5'end, rps12_3'end^{ac}, rps14, rps15, rps16^a, rps18, rps19</i>
	Ribosomal large subunit	<i>rpl2^{ac}, rpl14, rpl16^a, rpl20, rpl22, rpl23^c, rpl32, rpl33, rpl36</i>	<i>rpl2^{ac}, rpl14, rpl16^a, rpl20, rpl22, rpl23^c, rpl32, rpl33, rpl36</i>
	DNA-dependent RNA polymerase	<i>rpoA*, rpoB, rpoC1^a, rpoC2*</i>	<i>rpoA, rpoB, rpoC1^a, rpoC2</i>
Photosynthesis	Large subunit of rubisco	<i>rbcL*</i>	<i>rbcL</i>
	Photosystem I	<i>psaA*, psaB*, psaC, psal, psaj*</i>	<i>psaA, psaB, psaC, psal, psaj</i>
	Photosystem II	<i>psbA*, psbB*, psbC*, psbD*, psbE, psbF, psbH*, psbI*, psbJ*, psbK, psbL, psbM, psbN, psbT*, psbZ</i>	<i>psbA, psbB, psbC, psbD, psbE, psbF, psbH, psbI, psbJ, psbK, psbL, psbM, psbN, psbT, psbZ</i>
	NADH	<i>ndhA*, ndhB^c, ndhC, ndhD*</i>	<i>ndhA ndhJ, ndhK, ndhC,</i>

	dehydrogenase	<i>ndhE</i> , <i>ndhF</i> [*] , <i>ndhG</i> [*] , <i>ndhH</i> [*] , <i>ndhI</i> [*] , <i>ndhJ</i> [*] , <i>ndhK</i> [*]	<i>ndhB</i> ^{ac} , <i>ndhF</i> , <i>ndhI</i> , <i>ndhH</i> , <i>ndhD</i> <i>ndhE</i> , <i>ndhG</i>
	Cytochrome b/f complex	<i>petA</i> [*] , <i>petB</i> [*] , <i>petD</i> [*] , <i>petG</i> [*] , <i>petN</i>	<i>petA</i> , <i>petB</i> ^a , <i>petD</i> ^a , <i>petG</i> , <i>petL</i> , <i>petN</i>
	ATP synthase	<i>atpA</i> , <i>atpB</i> , <i>atpE</i> , <i>atpF</i> ^a , <i>atpH</i> , <i>atpI</i>	<i>atpA</i> , <i>atpB</i> , <i>atpE</i> , <i>atpF</i> ^a , <i>atpH</i> , <i>atpI</i>
Other	Maturase	<i>matK</i>	<i>matK</i>
	Subunit of acetyl-CoA carboxylase	<i>accD</i>	<i>accD</i>
	Membrane protein	<i>cemA</i> [*]	<i>cemA</i>
	Protease	<i>clpP</i> ^b	<i>clpP</i> ^b
	Translational initiation factor	<i>infA</i>	<i>infA</i>
	c-type cytochrome synthesis	<i>ccsA</i> [*]	<i>ccsA</i>
	Conserved open reading frames (<i>ycf</i>)	<i>ycf1</i> , <i>ycf1</i> [*] , <i>ycf2</i> ^c , <i>ycf3</i> ^b , <i>ycf4</i> [*]	<i>ycf1</i> , <i>ycf1</i> [*] , <i>ycf2</i> ^c , <i>ycf3</i> ^b , <i>ycf4</i>