**Table S4**. List of genes found in the chloroplast genomes of Calycanthaceae. Intron-containing genes are marked by asterisks (\*).

|  |  |  |
| --- | --- | --- |
| **Category for genes** | **Group of gene**  | **Name of gene** |
| Photosynthesis related genes | Rubisco | *rbcL* |
|  | Photosystem Ⅰ | *psaA,psaB,psaC,psaI,psaJ* |
|  | Assembly/stability of photosystem Ⅰ | *\*ycf3,ycf4* |
|  | Photosystem Ⅱ | *psbA,psbB,psbC,psbD,psbE,psbF,psbH,psbI,psbJ,psbK,psbL,psbM,psbN,psbT,psbZ* |
|  | ATP synthase | *atpA, atpB, atpE, \*atpF, atpH, atpI* |
|  | cytochrome b/f compelx | *petA, \*petB, \*petD, petG, petL, petN* |
|  | cytochrome c synthesis | *ccsA* |
|  | NADPH dehydrogenase | *\*ndhA, \*ndhB, ndhC, ndhD, ndhE, ndhF ,ndhG, ndhH, ndhI, ndhJ, ndhK* |
| Transcription and translation related genes | transcription | *rpoA, rpoB, \*rpoC1, rpoC2* |
|  | ribosomal proteins | *rps2, rps3, rps4, rps7, rps8, rps11, \*rps12, rps14,rps15, \*rps16, rps18, rps19,\*rpl2, rpl14, \*rpl16, rpl20, rpl22, rpl23, rpl32, rpl33,rpl36* |
|  | translation initiation factor | *infA* |
| RNA genes | ribosomal RNA | *rrn5, rrn4.5, rrn16, rrn23* |
|  | transfer RNA | *\*trnA*UGC*, trnCGCA, trnDGUC, trnEUUC, trnFGAA,trnGGCC, \*trnGUCC, trnHGUG, trnICAU, \*trnIGAU,\*trnKUUU, trnLCAA, \*trnLUAA, trnLUAG, trnfMCAUI,trnMCAU, trnNGUU, trnPUGG, trnQUUG,trnRACG, trnRUCU, trnSGCU, trnSGGA, trnSUGA, trnTGGU,trnTUGU, trnVGAC, \*trnVUAC, trnWCCA, trnYGUA* |
| Other genes | RNA processing | *matK* |
|  | carbon metabolism | *cemA* |
|  | fatty acid synthesis | *accD* |
|  | proteolysis | *\*clpP* |
| Genes of unknown function | conserved reading frames | *ycf1*, *ycf2* |