**Table S2. Seventy-one protein-coding genes involved in the phylogenetic analyses.**

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| --- | --- | --- | --- |
| Genes  | Aligned length (bp) | No. of variable sites(divergence%) | No. of parsimony informativesites (divergence%) |
| *atpA* | 1521 | 560 (36.82) | 393 (25.84) |
| *atpB* | 1503 | 517 (34.40) | 377 (25.08) |
| *atpE* | 402 | 183 (45.52) | 127 (31.59) |
| *atpF* | 645 | 293 (45.43) | 177 (27.44) |
| *atpH* | 246 | 67 (27.24) | 42 (17.07) |
| *atpI* | 744 | 254 (34.14) | 156 (20.97) |
| *ccsA* | 1053 | 541 (51.38) | 405 (38.46) |
| *cemA* | 706 | 386 (54.67) | 260 (36.83) |
| *infA* | 127 | 66 (51.97) | 34 (26.77) |
| *matK* | 1716 | 1104 (64.34) | 784 (45.69) |
| *ndhA* | 1130 | 520 (46.02) | 337 (29.82) |
| *ndhB* | 1581 | 218 (13.79) | 98 (6.20) |
| *ndhC* | 363 | 125 (34.44) | 83 (22.87) |
| *ndhD* | 1152 | 540 (46.88) | 371 (32.20) |
| *ndhE* | 306 | 128 (41.83) | 85 (27.78) |
| *ndhF* | 2344 | 1337 (57.04) | 947 (40.40) |
| *ndhG* | 490 | 237 (48.37) | 163 (33.27) |
| *ndhH* | 1194 | 449 (37.60) | 329 (27.55) |
| *ndhI* | 492 | 202 (41.06) | 139 (28.25) |
| *ndhJ* | 498 | 183 (36.75) | 118 (23.69) |
| *petA* | 972 | 375 (38.58) | 251 (25.82) |
| *petB* | 648 | 168 (25.93) | 119 (18.36) |
| *petD* | 502 | 135 (26.89) | 95 (18.92) |
| *petG* | 114 | 35 (30.70) | 20 (17.54) |
| *petL* | 298 | 68 (22.82) | 32 (10.74) |
| *petN* | 90 | 21 (23.33) | 12 (13.33) |
| *psaA* | 2253 | 604 (26.81) | 393 (17.44) |
| *psaB* | 2205 | 574 (26.03) | 385 (17.46) |
| *psaC* | 246 | 71 (28.86) | 56 (22.76) |
| *psaI* | 117 | 77 (65.81) | 34 (29.06) |
| *psaJ* | 129 | 40 (31.01) | 28 (21.71) |
| *psbA* | 1100 | 233 (21.18) | 145 (13.18) |
| *psbB* | 1527 | 459 (30.06) | 325 (21.28) |
| *psbC* | 1386 | 385 (27.78) | 274 (19.77) |
| *psbD* | 1062 | 237 (22.32) | 163 (15.35) |
| *psbE* | 282 | 62 (21.99) | 39 (13.83) |
| *psbF* | 82 | 24 (29.27) | 17 (20.73) |
| *psbH* | 231 | 78 (33.77) | 58 (25.11) |
| *psbI* | 77 | 22 (28.57) | 16 (20.78) |
| *psbJ* | 123 | 36 (29.27) | 22 (17.89) |
| *psbK* | 195 | 87 (44.62) | 50 (25.64) |
| *psbL* | 114 | 24 (21.05) | 14 (12.28) |
| *psbM* | 108 | 33 (30.56) | 22 (20.37) |
| *psbN* | 132 | 32 (24.24) | 21 (15.91) |
| *psbT* | 83 | 23 (27.71) | 14 (16.87) |
| *psbZ* | 189 | 56 (29.63) | 32 (16.93) |
| *rbcL* | 1428 | 470 (32.91) | 331 (23.18) |
| *rpl14* | 369 | 144 (39.02) | 98 (26.56) |
| *rpl16* | 354 | 150 (42.37) | 98 (27.68) |
| *rpl20* | 414 | 214 (51.69) | 135 (32.61) |
| *rpl22* | 386 | 228 (59.07) | 156 (40.41) |
| *rpl23* | 195 | 69 (35.38) | 23 (11.79) |
| *rpl32* | 139 | 70 (50.36) | 49 (35.25) |
| *rpl33* | 198 | 119 (60.10) | 78 (39.39) |
| *rpl36* | 114 | 49 (42.98) | 31 (27.19) |
| *rpoA* | 867 | 543 (62.63) | 336 (38.75) |
| *rpoB* | 3233 | 1349 (41.73) | 880 (27.22) |
| *rpoC1* | 2136 | 919 (43.02) | 607 (28.42) |
| *rpoC2* | 4316 | 2278 (52.78) | 1532 (35.50) |
| *rps2* | 726 | 312 (42.98) | 212 (29.20) |
| *rps3* | 654 | 355 (54.28) | 249 (38.07) |
| *rps4* | 633 | 281 (44.39) | 185 (29.23) |
| *rps7* | 468 | 97 (20.73) | 46 (9.83) |
| *rps8* | 423 | 234 (55.32) | 151 (35.70) |
| *rps11* | 468 | 230 (49.15) | 154 (32.91) |
| *rps12* | 360 | 84 (23.33) | 37 (10.28) |
| *rps14* | 354 | 121 (34.18) | 81 (22.88) |
| *rps15* | 199 | 116 (58.29) | 86 (43.22) |
| *rps16* | 233 | 119 (51.07) | 65 (27.90) |
| *rps18* | 383 | 155 (40.47) | 102 (26.63) |
| *rps19* | 279 | 143 (51.25) | 99 (35.48) |