**Table S1 List of genes present in the *Aegilops tauschii* chloroplast genome**

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Gene Group | Gene Name | |
| Self-replication | Ribosomal RNA genes | rrn4.5Sa rrn5Sa rrn16Sa  rrn23Sa | |
|  | Transfer RNA genes | trnC-GCA trnD-GUC trnE-UUC trnF-GAA trnG-GCC | |
|  |  | trnH-GUGa trnI-CAUa trnL-UAG trnL-CAAa trnM-CAU  trnN-GUUa trnA-UGCa | |
|  |  | trnP-UGG trnQ-UUG trnR-UCU trnR-ACGa trnS-GCU trnS-GGA |
|  |  | trnS-UGA trnT-GGU trnT-UGU trnV-GACa trnW-CCA |
|  |  | trnY-GUA trnfM-CAU1 trnfM-CAU2  tRNAK |
|  | Small subunit of ribosome | rps2 rps3 rps4 rps7a rps8 rps11 rps12b rps14 rps15a |
|  |  | rps16 rps18 rps19a |
|  | Large subunit of ribosome | rpl2a,b rpl14 rpl16 rpl20 rpl22 rpl23a rpl32 rpl33 rpl36 |
|  | DNA-dependent RNA polymerase | rpoA rpoB rpoC1 rpoC2 |
|  | Translational initiation factor | infA |
| photosynthesis | Subunits of photosystem I | psaA psaB psaC psaI psaJ ycf3c ycf4 |
|  | Subunits of photosystem II | psbA psbB psbC psbD psbE psbF psbH psbI |
|  |  | psbJ psbK psbL psbM psbN psbT psbZ |
|  | NADH oxidoreductase | ndhAb ndhBa,b ndhC ndhD ndhE ndhF ndhG ndhH ndhI ndhJ ndhK |
|  | Subunits of cytochrome | petA petB petD petG petN petL |
|  | Subunits of ATP synthase | atpA atpB atpE atpFb atpH atpI |
|  | Large subunit of Rubisco | rbcL |
| Other genes | Maturase | matk |
|  | Envelope membrane protein | cemA |
|  | C-type cytochrome synthesis gene | ccsA |
|  | Protease | clpP |

a Two gene copies in IRs; b gene containing a single intron; c gene containing two introns;

1，2 represent for two genes in different CDS