**Annex 2 Table S2** NCBI accession numbers of proteins in phylogenetic tree

| No. | ER family proteins | Plant Species | NCBI accession number | Classification |
| --- | --- | --- | --- | --- |
| Group I | | | | |
| 1 | *SiER1\_X1* | *Setaria italica* L. | XP\_014660111.1 | monocots |
| 2 | *SiER1\_X2* | *Setaria italica* L. | XP\_014660109.1 | monocots |
| 3 | *SiER1\_X3* | *Setaria italica* L. | XP\_014660108.1 | monocots |
| 4 | *SiER1\_X4* | *Setaria italica* L. | Annex 4 (OP492075) | monocots |
| 5 | *SiER1\_X5* | *Setaria italica* L. | XP\_034576484.1 | monocots |
| 6 | *SiER1\_X6* | *Setaria italica* L. | XP\_034576491.1 | monocots |
| 7 | OsERECTA | *Oryza sativa Japonica Group* L. | XP\_015623966.1 | monocots |
| Group II | | | | |
| 8 | *SiER4\_X1* | *Setaria italica* L. | XP\_004964941.1 | monocots |
| 9 | *SiER4\_X2* | *Setaria italica* L. | XP\_004964942.1 | monocots |
| 10 | *SbER10\_X1* | *Sorghum bicolor* L. | XP\_002438023.1 | monocots |
| 11 | *ZmERECTA* | *Zea mays* L. | NP\_001345763.1 | monocots |
| 12 | *AetERECTA* | *Aegilops tauschii subsp. t.auschii* L. | XP\_020193416.1 | monocots |
| 13 | *TaERECTA* | *Triticum aestivum* L | AFJ38187.2 | monocots |
| 14 | *HvERECTA* | *Hordeum vulgare subsp. vulgare* L. | AKU38976.1 | monocots |
| 15 | *BdERECTA* | *Brachypodium distachyon* L. | XP\_003564133.1 | monocots |
| Group III | | | | |
|  | *GmERECTA* | *Glycine max* L. | XP\_003544548.1 | dicots |
|  | *VvERECTA* | *Vitis vinifera* L. | XP\_002280069.2 | dicots |
| Group IV | | | | |
|  | *SiERL4* | *Setaria italica* L. | XP\_004964421.1 | monocots |
|  | *AtERECTA* | *Arabidopsis thaliana* L. | NP\_180201.1 | dicots |
|  | *AtERL\_1* | *Arabidopsis thaliana* L. | NP\_001190595.1 | dicots |
|  | *AtERL\_2* | *Arabidopsis thaliana* L. | NP\_001331523.1 | dicots |

Note: OP492075 is a GenBank accession number for *SiER1\_X4*