# SUPPLEMENTARY MATERIAL

**Table S1.** sgRNAs for *EgPDS* and *EgBRI1* genes

| Gene   | sgRNA  | Guide sequence   | PAM   | Position | GC% |
|--------|--------|------------------|-------|----------|-----|
| *EgPDS* | gPDS1  | AATTGTGCACGCCAGGTAA | AGG   | 321      | 50  |
|        | gPDS2  | ATACCAGGATATATCTCTAC | TGG   | 102      | 40  |
|        | gPDS3  | TTGCTGCAATGATATCTCA | AGG   | 238      | 45  |
|        | gPDS4  | GCAGCTTGAAGAGGATGAGA | TGG   | 444      | 50  |
|        | gPDS5  | GCTTGCCCCTCCAGATGAG | AGG   | 720      | 70  |
| *EgBRI1* | gBRI1 | TACAGTCCCGAGCTCGGCC | GGG   | 1857     | 70  |
|         | gBRI2  | CTTGGAACACATGATCTTC | CCG   | 2026     | 55  |
|         | gBRI3  | GGAATCGGGGCCGGCTCGGCAAT | AGG  | 1406     | 70  |
|         | gBRI4  | ACCTCCGAGGATATGCTGCTC | GGG  | 409      | 60  |
|         | gBRI5  | TTTCAGACTTTACTGTCTCTC | GGG  | 886      | 45  |

**Table S2.** Primers used for molecular confirmation of gene editing event

| Gene   | sgRNA  | Forward Primer Sequence   | Reverse Primer Sequence   |
|--------|--------|---------------------------|---------------------------|
| *EgPDS* | gPDS1  | GACTATCCACGCTGAACT        | GCAAGATATTGCTGTAAGA       |
|        | gPDS2  | ATACATTGCGATATATCTCTCC    | GGCTTGTGGCTCTCTCTTGG      |
|        | gPDS3  | TAGCGAGTTATGAGCTGCCC      | GACAGTATTCTCAAGTTTCCAG    |
|        | gPDS4  | ACCACCTCTCGAATGCTGCTGAT  | TGAACGGGACAGACTGAGGA      |
|        | gPDS5  | AGGCATCTCGCTGCTGACAT      | TGGCCGACACATGCTTCTCA      |
| *EgBRI1* | gBRI1 | CTTGAGACACCTGTTACAAACC   | TCCAAGACACACATAGTGG       |
|         | gBRI2  | CAGATCGGGAGCCAGCTTGTGCT  | TGGCATTAGCAGCTGTTCTCCGA   |
|         | gBRI3  | CCGGAAGATGTGTTCCGCTGCTG  | GGAAGAAATGTTCCGCTGCTG     |
|         | gBRI4  | GCCAAGATCGAGCCTGCTGCTGAT | AGTTGCGAGGAGATTGAGG       |
|         | gBRI5  | CTACCTGAAACCTCTCGCCA      | AGGGGCCCAGAGAATTGTT       |

**Table S3.** Primers for PCR confirmation of transgene

| Gene   | Forward Primer Sequence   | Reverse Primer Sequence   |
|--------|---------------------------|---------------------------|
| *Cas9* | AGAATCTTCTGAGGTCAGTTCCT  | ACCTGCTATTACCCTTGGCG      |
| *OsU3* | AGGCGTCTTCTCTGGTGCTGCT   | CGAACAGGCTTATGCTCAG       |