**Table S3.** The verified lncRNA-derived-SSR markers and their amplification results with Dongxiang wild rice (*Oryza rufipogon* Griff.) and worldwide rice (*Oryza sativa* L.) cultivars in this study

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Marker | Forward primer (5’-3’) | Reverse primer (5’-3’) | Repeat motif | Chromosome | Number of  alleles | Gene diversity | PIC\* |
|
| Lnc-SSR-48851 | AACACTGCACTGCACACACA | CTTGGCTTTCGATGGTGTTT | (TC)16 | 1 | 7 | 0.80 | 0.77 |
| Lnc-SSR-12281 | CGAGATGCAGTGGTAGGACA | TGCACGGACAGATCAGTTTC | (TGGA)6 | 1 | 4 | 0.58 | 0.49 |
| Lnc-SSR-24161 | GACGTCGGTTTGTCTCCTTC | CATATTCGTGCTCCATGACG | (CCT)5 | 1 | 4 | 0.56 | 0.47 |
| Lnc-SSR-38981 | ACCGCAGAAAACAATGAACC | AGCAAGGAGGAATGGCAAAA | (TA)7 | 1 | 4 | 0.58 | 0.53 |
| Lnc-SSR-4571 | TGGGTTGTCAAGAACATGGA | ATTCTTTCAGGCAGCGTGTT | (TC)7 | 1 | 5 | 0.63 | 0.58 |
| Lnc-SSR-78041 | TTCTGATCTCACCCGGATTC | AGATGGAGATGGCGATGAAG | (TA)6 | 1 | 3 | 0.49 | 0.41 |
| Lnc-SSR-88881 | ATCCCAGAAGCAAACTCGAA | GGGGTTCGTGAGTTTGTCAG | (CT)12 | 1 | 5 | 0.72 | 0.67 |
| Lnc-SSR-237382 | CCCTTGACGCCAACAAAATA | GCCAAAAGATGACCTTGAATG | (AT)11 | 2 | 11 | 0.88 | 0.87 |
| Lnc-SSR-302282 | TTGTGGTGGCCGTACTGATA | CCTAGCTGCTCCTGCACTCT | (GA)12 | 2 | 8 | 0.82 | 0.80 |
| Lnc-SSR-236112 | GGCCCAGTTAAGGTCCAATC | CAGGCAGGAACAGAAGATCG | (CGC)7 | 2 | 5 | 0.48 | 0.38 |
| Lnc-SSR-260612 | CCTCCTTCCCCATCTCCTTC | CCTTCTTCTTCCTCCCGTCT | (GAG)4 | 2 | 3 | 0.73 | 0.69 |
| Lnc-SSR-353993 | CCAGCAGGGAGTAAGTCAGC | AGTGGAGTGGAGTGGAGACG | (CGCCTC)3 | 3 | 6 | 0.40 | 0.32 |
| Lnc-SSR-332463 | TGACAAGCAGATTGGACTGG | CTCACACGCCTCAGGTGTAA | (TA)7 | 3 | 2 | 0.83 | 0.81 |
| Lnc-SSR-437944 | TTCGTGATCTCTGAGCCAAA | TGTGATATGCAAGCAGCAGA | (TC)11 | 4 | 7 | 0.58 | 0.49 |
| Lnc-SSR-448534 | AGCCCAATCAGAGAGCAAGA | GCGCAGAGAGAGAGATGGTC | (AAAT)3 | 4 | 4 | 0.09 | 0.09 |
| Lnc-SSR-417124 | TAGCAGGAGGAGAGCAGAGG | CGGATAAGCTGGAGGAGGAG | (AGC)8 | 4 | 3 | 0.66 | 0.58 |
| Lnc-SSR-418954 | GCTTGAGGATGGCCTAGCTT | CGCGTTCTACAGATTGGTGT | (TA)7 | 4 | 3 | 0.56 | 0.47 |
| Lnc-SSR-463015 | GTGCAGGAGAGATCGAAAGG | ATGCTGCTTGCTGAAAGGTT | (AGC)5 | 5 | 3 | 0.68 | 0.62 |
| Lnc-SSR-460915 | GAATGGATCCCAGAGCAGAG | CGTTTCGCTTCATTCATTCA | (CA)6 | 5 | 4 | 0.83 | 0.81 |
| Lnc-SSR-498065 | CTCCAGGCGAGTCCACTTAC | CAAGGGTGGAGGTGACTGAT | (CCG)4 | 5 | 4 | 0.66 | 0.58 |
| Lnc-SSR-506715 | TACTCCCCCTATCCAACTCG | AAAGGGAATGCCAGAGATCA | (TA)6 | 5 | 4 | 0.51 | 0.45 |
| Lnc-SSR-521796 | CGTTTGACTTGGCCACCTAT | CATGCAGGTTTGTTGTTTGG | (CATTA)3 | 6 | 4 | 0.67 | 0.62 |
| Lnc-SSR-566686 | CCGCCTTTCCCTATCTCTCT | TCCTACCACCTCCAATGTCC | (CTCG)4 | 6 | 8 | 0.78 | 0.74 |
| Lnc-SSR-566226 | TACCCTCCACTCCACTCCAC | CGCGCGATATTTTTCTTTTC | (CCA)6 | 6 | 3 | 0.60 | 0.52 |
| Lnc-SSR-622797 | TAATGGTAGCCTCGCATTCC | GCATGCACACTGATGCTGAT | (TGGACC)3 | 7 | 2 | 0.48 | 0.37 |
| Lnc-SSR-579657 | GGGAAGGGAAGGAGTGAGTC | CCCCCTCCTGTACTGACAGA | (CT)10 | 7 | 4 | 0.30 | 0.25 |
| Lnc-SSR-612307 | CATCACCTGCTCAGCTCGTA | CACAAGTCCTCATGCATCGT | (CA)9 | 7 | 5 | 0.69 | 0.63 |
| Lnc-SSR-631408 | GTGTGGTGAAGGAAGAAAGAAA | CCTCCCTCCCTCCTGTTTAT | (GA)10 | 8 | 6 | 0.66 | 0.60 |
| Lnc-SSR-631828 | GTGATAAGCCTACCGCCAAG | CTGGTAATCGGGAAGGGTTT | (AGA)5 | 8 | 4 | 0.58 | 0.53 |
| Lnc-SSR-653108 | CTCTCTTCTCGCAGCAAATG | CGACTTTGTACCCCGACAAC | (TGT)4 | 8 | 2 | 0.43 | 0.35 |
| Lnc-SSR-6999419 | CAACCACATGGAAATTGTGC | GGAGGGGGTTGTGATTTACC | (ATC)4 | 9 | 2 | 0.69 | 0.63 |
| Lnc-SSR-705689 | AGTCAAGCACACAGCCACAC | CCCATCCAACAAATTGCCTA | (GCG)5 | 9 | 5 | 0.04 | 0.04 |
| Lnc-SSR-1066110 | CTCACACAAGCTCGAAACCA | AGCCTCCTCTCACCAAGTCA | (CAAG)3 | 10 | 4 | 0.54 | 0.45 |
| Lnc-SSR-1027810 | CAAGACCATGTGAGCTGTGG | CAGATCCAATTGTGCTACCAA | (TTTTG)3 | 10 | 4 | 0.24 | 0.23 |
| Lnc-SSR-1645511 | GTCGATCCCGGAATAACATC | ATCAGCTCATCGTCATGTCC | (GGA)5 | 11 | 3 | 0.27 | 0.23 |
| Lnc-SSR-1716611 | CTCAATTTGCCTCCATGACC | ACCCTTGCAAATCAAAGCAG | (GA)6 | 11 | 5 | 0.77 | 0.73 |
| Lnc-SSR-1406311 | AAAGGAATCATCGCATCGAG | AAAGAACAAGAACAGCGTCCA | (CGG)5 | 11 | 2 | 0.44 | 0.41 |
| Lnc-SSR-1479811 | CGATAGAGAGACGGGCACAT | TCAATGGATCACCATGTCGT | (CGC)4 | 11 | 4 | 0.65 | 0.58 |
| Lnc-SSR-2240612 | CTTGTAGGGGTCGTCGATTC | CAAAGGAGCGTCAGCTTTCT | (CGC)6 | 12 | 3 | 0.50 | 0.38 |
| Lnc-SSR-22406122 | TCCATTTCTGTTCCAATACTCC | TCGACGACCCCTACAAGTTC | (CAT)4 | 12 | 2 | 0.09 | 0.09 |
| Lnc-SSR-1831812 | TGTAGCTAGGGTTCGCTGGT | CGGAGTGGAGTTGCTTTCTC | (AGA)5 | 12 | 6 | 0.53 | 0.48 |
| Lnc-SSR-2151512 | GAGGTAAGCCGTCCTTCTCC | GGTGGAAGAAGGTGACGATG | (GCC)5 | 12 | 6 | 0.38 | 0.36 |
| Mean value |  |  |  |  | 4.36 | 0.56 | 0.50 |

\*PIC: polymorphism information content