

Table S1. Gene family of selected GST genes in rice.

| Gene Name | Locus ID | Synonym | Class | Pseudomolecule position | Mol. Wt. (Da) | Direction of transcription |
|-----------------|------------|-----------------|-------|-------------------------|---------------|----------------------------|
| <i>OsGSTU5</i> | Os09g20220 | <i>OsGSTU5</i> | TAU | 12120224 - 12119538 | 25842.58 | Upward |
| <i>OsGSTU6</i> | Os01g37750 | | TAU | 21442537 - 21441785 | 26022.7 | Upward |
| <i>OsGSTF10</i> | Os01g27390 | <i>OsGSTF10</i> | PHI | 15618603 - 15621075 | 23930.56 | Downward |
| <i>OsGSTU30</i> | Os10g38600 | <i>OsGSTU30</i> | TAU | 20265421 - 20266251 | 25780.31 | Downward |
| <i>OsGSTU37</i> | Os01g72150 | | TAU | 42173295 - 42174100 | 25733.44 | Downward |
| <i>OsGSTU41</i> | Os01g72160 | | TAU | 42174579 - 42175739 | 25523.19 | Downward |

Table S3. List of primers used for RT-PCR analysis of Cr (VI) stress responsive genes in rice roots.

| Gene name (Locus ID) | Primers |
|------------------------------|--------------------------------------------------------------------|
| <i>OsGSTU5</i> (Os09g20220) | F: 5'-CTCGTCATCCTCGAGTACATCG-3' R: 5'-GCTTCTTGTCGACGTAGTCCG-3' |
| <i>OsGSTU6</i> (Os01g37750) | F: 5'-CAGGATCGTGGACGCGGACAG-3' R: 5'-CCGCCGCGATGAGGCGTTCGAG-3' |
| <i>OsGSTU10</i> (Os01g27390) | F: 5'-ATTAAGCAGACGGCATCTTCAG-3' R: 5'-GCATCATGTCACGCAACGCTGA-3' |
| <i>OsGSTU30</i> (Os10g38600) | F: 5'-GATCTCCGCAACAAGAGCGACC-3' R: 5'-GTCGATGTACTGCACGATGATC-3' |
| <i>OsGSTU37</i> (Os01g72150) | F: 5'-AGCTATCTGCGAATCACTTGTC-3' R: 5'-ACGGCAACGTGCACTTGTGATC-3' |
| <i>OsGSTU41</i> (Os01g72160) | F: 5'-GCCGAGTCCCTCGTCGTCGTC-3' R: 5'-ATGGAGGGAGTACGTCTTAATC-3' |
| Actin | F: 5'-GAGTATGATGAGTCGGGTCCAG-3' R: 5'-ACACCAACAATCCCAAACAGAG-3' |

Table S4. List of primers of both genes (OsGSTU30, OsGSTU41) used for cloning and transformation. Underline sequences showing sequence of restriction site.

| Gene name(Locus ID) | Primers |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <i>OsGSTU30</i> (Os10g38600) | F1: 5'-GAAA <u>ACTCCCCGGGCGTAG</u> -3' R1: 5'-CGACGCCTGCTTAAGCTGAG-3' |
| <i>OsGSTU41</i> (Os01g72160) | F1: 5'-GCCACTAACCCGGTGTAAGC-3' R1: 5'-CAGCATCGAAATTCACGAG-3' |
| <i>OsGSTU30</i> (Os10g38600) | F2: 5'-GTGCAGGAAATGGCAGGAGGAGGAG-3' R2: 5'-CTGAGTAAATTCAGTTGTTG-3' |
| <i>OsGSTU41</i> (Os01g72160) | F2: 5'-GCAAGCAAAAAATGGTTAAGCT -3' R2: 5'-CGAGTAATAAAATTACTGC-3' |
| <i>OsGSTU30</i> (Os10g38600) | F(BamHI): 5'-CGGGAT <u>CCCGATGGCACCAGGAGGAGGAGC</u> -3' R(HindIII): 5'-CCCA <u>AAGCTTGGGCTGAGTAAATTCAGTTGTTT</u> G-3' |
| <i>OsGSTU41</i> (Os01g72160) | F(BamHI): 5'-GGGAT <u>CCCAATGGTTAAGCTAATCAGCGCCTTC</u> -3' R(HindIII): 5' <u>CCCAAGCTTGGGATTATTTCTGCAACTTTGCCTTGGC</u> -3' |