

## **Selection of reference genes for qRT-PCR analysis in *Glycyrrhiza* species under abiotic stresses and hormonal treatments**

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**Table S1. All the Cq Values under different experimental conditions in *G.uralensis*.**

| Conditions                 | <i>ACT</i> | <i>CAC</i> | <i>CYP</i> | <i>DNAJ</i> | <i>DREB</i> | <i>EF1</i> | <i>RAN</i> | <i>TIF1</i> | <i>TUB</i> | <i>UBC2</i> | <i>ABCC2</i> | <i>COPS3</i> | <i>CS</i> | <i>R3HDM2</i> |
|----------------------------|------------|------------|------------|-------------|-------------|------------|------------|-------------|------------|-------------|--------------|--------------|-----------|---------------|
| <b>Abiotic stresses</b>    |            |            |            |             |             |            |            |             |            |             |              |              |           |               |
| Control_Leaf_1             | 19.89      | 23.70      | 22.51      | 21.19       | 24.82       | 23.81      | 24.48      | 17.30       | 23.61      | 20.71       | 21.12        | 25.63        | 23.11     | 23.61         |
| Control_Leaf_2             | 25.11      | 27.63      | 25.58      | 24.77       | 27.67       | 29.57      | 27.79      | 21.81       | 27.58      | 24.25       | 25.47        | 25.95        | 26.19     | 27.56         |
| Control_Leaf_3             | 26.57      | 25.74      | 24.92      | 23.03       | 26.40       | 28.80      | 25.90      | 21.10       | 28.06      | 22.49       | 24.45        | 26.06        | 25.02     | 27.79         |
| Control_Root_1             | 24.64      | 27.85      | 24.60      | 24.58       | 28.27       | 27.71      | 27.40      | 21.65       | 26.26      | 24.02       | 24.24        | 24.25        | 25.74     | 26.88         |
| Control_Root_2             | 22.90      | 26.23      | 22.93      | 23.10       | 26.71       | 26.64      | 25.66      | 20.01       | 24.64      | 22.46       | 22.70        | 24.97        | 23.98     | 25.22         |
| Control_Root_3             | 25.65      | 27.83      | 25.55      | 24.71       | 28.42       | 28.62      | 27.90      | 22.60       | 26.76      | 24.05       | 23.96        | 25.53        | 25.61     | 26.62         |
| Osmotic stress_Leaf_1      | 20.12      | 23.97      | 21.63      | 21.29       | 24.78       | 23.76      | 23.87      | 18.24       | 22.74      | 20.98       | 21.29        | 23.39        | 22.97     | 23.21         |
| Osmotic stress_Leaf_2      | 27.11      | 27.71      | 25.61      | 25.07       | 27.78       | 30.50      | 27.69      | 22.71       | 28.40      | 24.85       | 26.52        | 26.83        | 27.01     | 28.52         |
| Osmotic stress_Leaf_3      | 29.13      | 29.41      | 28.02      | 29.29       | 27.95       | 35.00      | 32.36      | 26.40       | 34.74      | 26.90       | 31.32        | 27.50        | 31.67     | 32.06         |
| Osmotic stress_Root_1      | 22.97      | 26.26      | 23.65      | 23.13       | 27.08       | 26.05      | 25.92      | 19.91       | 24.68      | 22.66       | 22.74        | 25.69        | 24.33     | 25.19         |
| Osmotic stress_Root_2      | 24.23      | 27.63      | 24.53      | 24.63       | 28.36       | 28.21      | 27.25      | 22.28       | 25.85      | 24.30       | 24.12        | 25.15        | 25.59     | 26.40         |
| Osmotic stress_Root_3      | 22.10      | 25.04      | 22.17      | 21.87       | 25.62       | 25.12      | 24.59      | 19.84       | 23.58      | 21.55       | 21.80        | 25.03        | 22.78     | 24.46         |
| Salt stress_Leaf_1         | 19.63      | 23.84      | 21.80      | 20.97       | 24.71       | 23.56      | 23.98      | 17.92       | 22.76      | 20.90       | 21.09        | 23.32        | 22.75     | 22.99         |
| Salt stress_Leaf_2         | 22.88      | 26.12      | 24.58      | 23.49       | 26.13       | 26.87      | 26.06      | 20.01       | 24.75      | 22.64       | 23.45        | 26.40        | 24.65     | 25.80         |
| Salt stress_Leaf_3         | 25.43      | 25.79      | 24.16      | 22.99       | 26.52       | 27.73      | 25.65      | 21.34       | 25.73      | 22.57       | 23.38        | 29.99        | 24.30     | 26.46         |
| Salt stress_Root_1         | 24.28      | 27.44      | 24.24      | 24.00       | 28.12       | 27.15      | 27.37      | 21.69       | 25.51      | 23.83       | 23.00        | 25.10        | 24.96     | 25.64         |
| Salt stress_Root_2         | 22.36      | 27.88      | 25.04      | 24.84       | 28.62       | 29.26      | 27.65      | 22.22       | 26.55      | 24.55       | 24.67        | 26.30        | 25.81     | 27.17         |
| Salt stress_Root_3         | 25.72      | 25.79      | 25.97      | 25.05       | 28.96       | 29.14      | 28.44      | 23.20       | 26.76      | 24.91       | 24.37        | 24.65        | 25.78     | 26.84         |
| <b>Hormonal treatments</b> |            |            |            |             |             |            |            |             |            |             |              |              |           |               |
| Control_Leaf_1             | 21.97      | 25.23      | 21.93      | 22.29       | 25.67       | 26.47      | 24.22      | 19.75       | 23.24      | 21.46       | 22.03        | 24.81        | 23.53     | 24.91         |
| Control_Leaf_2             | 22.09      | 24.74      | 21.96      | 21.42       | 24.26       | 26.33      | 23.02      | 18.72       | 23.91      | 20.35       | 21.68        | 23.83        | 22.73     | 24.87         |

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|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Control_Leaf_3        | 22.58 | 25.80 | 22.62 | 23.09 | 26.12 | 26.06 | 24.92 | 20.08 | 23.30 | 21.73 | 22.21 | 23.58 | 23.67 | 24.93 |
| Control_Root_1        | 21.04 | 26.12 | 24.15 | 22.77 | 26.18 | 27.14 | 25.27 | 20.56 | 24.20 | 22.15 | 22.81 | 25.86 | 24.08 | 25.58 |
| Control_Root_2        | 23.26 | 25.86 | 22.79 | 22.72 | 26.28 | 26.47 | 25.21 | 20.69 | 23.71 | 22.11 | 22.07 | 24.48 | 23.16 | 25.09 |
| Control_Root_3        | 25.00 | 27.86 | 24.85 | 24.64 | 28.23 | 27.68 | 27.29 | 22.74 | 25.08 | 24.03 | 23.89 | 24.86 | 24.95 | 26.49 |
| ABA treatment_Leaf_1  | 22.49 | 25.72 | 22.44 | 22.60 | 25.94 | 25.98 | 24.34 | 19.68 | 23.34 | 21.56 | 22.56 | 24.47 | 23.68 | 25.28 |
| ABA treatment_Leaf_2  | 22.08 | 25.52 | 22.60 | 22.66 | 25.91 | 26.65 | 24.49 | 19.58 | 23.52 | 21.58 | 22.46 | 24.81 | 23.70 | 25.33 |
| ABA treatment_Leaf_3  | 22.93 | 26.04 | 23.02 | 23.17 | 26.22 | 27.23 | 24.98 | 19.94 | 23.82 | 21.96 | 22.95 | 24.62 | 24.12 | 25.70 |
| ABA treatment_Root_1  | 22.43 | 25.97 | 22.94 | 22.16 | 25.87 | 27.15 | 25.28 | 20.03 | 24.63 | 21.90 | 23.11 | 24.75 | 23.83 | 25.51 |
| ABA treatment_Root_2  | 23.31 | 26.90 | 23.78 | 23.31 | 27.12 | 28.36 | 26.03 | 20.92 | 25.10 | 22.79 | 24.09 | 24.66 | 24.73 | 25.91 |
| ABA treatment_Root_3  | 25.18 | 28.51 | 26.12 | 24.91 | 28.82 | 29.29 | 27.92 | 23.70 | 26.04 | 24.90 | 24.54 | 25.75 | 25.56 | 26.75 |
| MeJA treatment_Leaf_1 | 23.74 | 26.46 | 23.71 | 22.89 | 26.05 | 27.03 | 25.63 | 19.50 | 25.25 | 21.90 | 22.99 | 24.50 | 24.02 | 26.00 |
| MeJA treatment_Leaf_2 | 22.12 | 25.55 | 22.57 | 22.00 | 25.37 | 26.15 | 24.57 | 19.37 | 23.69 | 21.10 | 21.82 | 26.94 | 22.52 | 24.71 |
| MeJA treatment_Leaf_3 | 23.91 | 26.87 | 23.63 | 23.47 | 26.87 | 27.58 | 26.03 | 20.94 | 24.74 | 22.73 | 22.93 | 23.74 | 23.85 | 25.64 |
| MeJA treatment_Root_1 | 22.44 | 25.82 | 22.74 | 23.02 | 25.53 | 26.91 | 24.96 | 19.69 | 23.71 | 21.81 | 22.72 | 24.82 | 24.07 | 25.99 |
| MeJA treatment_Root_2 | 22.31 | 25.64 | 22.70 | 22.59 | 25.44 | 26.33 | 24.41 | 19.89 | 23.17 | 21.61 | 22.04 | 24.47 | 23.49 | 24.84 |
| MeJA treatment_Root_3 | 23.39 | 26.08 | 23.32 | 23.47 | 26.32 | 26.98 | 25.27 | 20.72 | 24.02 | 22.46 | 22.91 | 24.54 | 24.27 | 25.60 |

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**Table S2. All the Cq Values under different experimental conditions in *G. inflata*.**

| Conditions                 | <i>ACT</i> | <i>CAC</i> | <i>CYP</i> | <i>DNAJ</i> | <i>DREB</i> | <i>EF1</i> | <i>RAN</i> | <i>TIF1</i> | <i>TUB</i> | <i>UBC2</i> | <i>ABCC2</i> | <i>COPS3</i> | <i>CS</i> | <i>R3HDM2</i> |
|----------------------------|------------|------------|------------|-------------|-------------|------------|------------|-------------|------------|-------------|--------------|--------------|-----------|---------------|
| <b>Abiotic stresses</b>    |            |            |            |             |             |            |            |             |            |             |              |              |           |               |
| Control_Leaf_1             | 22.36      | 25.47      | 23.35      | 22.58       | 25.98       | 25.33      | 24.97      | 19.48       | 24.02      | 20.95       | 22.52        | 23.41        | 23.80     | 23.58         |
| Control_Leaf_2             | 23.65      | 25.67      | 22.91      | 22.85       | 26.23       | 25.02      | 24.93      | 20.55       | 24.26      | 21.46       | 22.47        | 23.52        | 24.21     | 24.23         |
| Control_Leaf_3             | 23.53      | 25.21      | 23.34      | 22.72       | 24.68       | 24.82      | 24.65      | 19.09       | 23.88      | 20.07       | 20.89        | 23.23        | 22.64     | 23.76         |
| Control_Root_1             | 19.86      | 26.98      | 25.22      | 22.47       | 26.42       | 25.24      | 25.95      | 20.30       | 26.17      | 22.21       | 21.88        | 23.99        | 23.72     | 24.09         |
| Control_Root_2             | 19.21      | 26.31      | 23.76      | 22.79       | 25.18       | 23.93      | 25.98      | 19.56       | 24.69      | 21.58       | 21.18        | 23.27        | 22.85     | 23.80         |
| Control_Root_3             | 20.00      | 25.81      | 23.81      | 22.32       | 26.37       | 23.91      | 26.13      | 19.87       | 23.75      | 22.18       | 20.97        | 23.55        | 22.64     | 24.00         |
| Osmotic stress_Leaf_1      | 17.76      | 24.90      | 22.12      | 22.06       | 25.43       | 24.15      | 23.36      | 18.48       | 22.97      | 21.22       | 21.90        | 22.87        | 23.28     | 23.02         |
| Osmotic stress_Leaf_2      | 18.19      | 24.91      | 22.64      | 22.43       | 27.09       | 26.08      | 24.16      | 20.02       | 23.41      | 22.51       | 23.01        | 23.90        | 24.20     | 24.05         |
| Osmotic stress_Leaf_3      | 24.24      | 26.27      | 23.51      | 23.20       | 26.23       | 24.68      | 25.11      | 19.18       | 24.18      | 20.58       | 22.47        | 23.03        | 23.58     | 23.38         |
| Osmotic stress_Root_1      | 21.03      | 25.01      | 22.91      | 20.80       | 24.81       | 23.83      | 24.37      | 18.84       | 23.94      | 20.93       | 20.53        | 22.83        | 22.49     | 23.02         |
| Osmotic stress_Root_2      | 20.67      | 25.51      | 22.69      | 21.26       | 24.72       | 22.72      | 24.02      | 18.51       | 22.31      | 21.00       | 20.59        | 21.79        | 22.51     | 22.63         |
| Osmotic stress_Root_3      | 18.81      | 24.86      | 22.68      | 21.46       | 24.57       | 23.12      | 25.07      | 18.56       | 22.96      | 20.80       | 20.27        | 22.53        | 22.30     | 22.72         |
| Salt stress_Leaf_1         | 21.61      | 25.06      | 22.56      | 22.54       | 27.21       | 24.41      | 24.02      | 24.89       | 23.21      | 22.77       | 23.54        | 23.18        | 24.97     | 23.47         |
| Salt stress_Leaf_2         | 19.55      | 27.02      | 24.87      | 24.28       | 27.64       | 26.31      | 25.80      | 26.50       | 25.06      | 24.01       | 24.91        | 24.72        | 26.51     | 24.87         |
| Salt stress_Leaf_3         | 17.65      | 26.77      | 24.56      | 24.22       | 27.18       | 23.90      | 25.83      | 24.63       | 25.10      | 22.66       | 23.32        | 22.82        | 24.31     | 23.14         |
| Salt stress_Root_1         | 25.16      | 26.31      | 25.28      | 22.65       | 27.14       | 23.82      | 25.68      | 25.14       | 24.67      | 24.29       | 22.26        | 22.94        | 24.24     | 23.06         |
| Salt stress_Root_2         | 18.48      | 25.54      | 23.94      | 21.71       | 25.67       | 23.95      | 24.94      | 24.90       | 23.92      | 21.26       | 21.55        | 22.75        | 23.55     | 23.01         |
| Salt stress_Root_3         | 24.17      | 25.84      | 24.00      | 22.38       | 21.76       | 23.48      | 25.04      | 24.46       | 23.14      | 22.56       | 21.53        | 22.39        | 23.09     | 22.67         |
| <b>Hormonal treatments</b> |            |            |            |             |             |            |            |             |            |             |              |              |           |               |
| Control_Leaf_1             | 17.55      | 26.10      | 22.26      | 23.37       | 24.76       | 23.04      | 24.31      | 18.99       | 22.80      | 20.72       | 21.94        | 22.38        | 22.83     | 23.74         |
| Control_Leaf_2             | 17.95      | 26.16      | 22.62      | 23.86       | 25.39       | 23.46      | 24.65      | 18.71       | 23.18      | 21.09       | 22.72        | 22.55        | 23.52     | 23.02         |
| Control_Leaf_3             | 16.72      | 24.85      | 21.47      | 22.20       | 23.95       | 22.86      | 23.20      | 17.60       | 22.27      | 19.74       | 21.08        | 21.87        | 22.25     | 23.29         |
| Control_Root_1             | 20.10      | 25.24      | 22.31      | 21.92       | 24.84       | 21.70      | 24.49      | 19.62       | 22.29      | 21.00       | 20.17        | 21.79        | 21.90     | 22.93         |

|                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Control_Root_2        | 19.51 | 26.72 | 22.18 | 23.92 | 26.29 | 23.17 | 26.34 | 20.24 | 24.11 | 22.69 | 22.13 | 22.52 | 23.18 | 23.29 |
| Control_Root_3        | 17.94 | 23.46 | 20.81 | 20.17 | 23.87 | 20.06 | 22.81 | 17.18 | 21.24 | 19.77 | 19.59 | 20.29 | 20.55 | 21.28 |
| ABA treatment_Leaf_1  | 18.81 | 24.93 | 23.31 | 24.23 | 24.83 | 25.21 | 25.25 | 19.14 | 24.08 | 20.51 | 21.78 | 22.91 | 23.07 | 24.13 |
| ABA treatment_Leaf_2  | 18.01 | 26.59 | 23.01 | 24.09 | 24.61 | 24.59 | 24.91 | 18.18 | 23.98 | 20.57 | 21.80 | 22.81 | 23.19 | 24.05 |
| ABA treatment_Leaf_3  | 20.29 | 25.53 | 22.22 | 22.92 | 24.83 | 25.20 | 23.96 | 19.63 | 22.67 | 20.48 | 21.81 | 23.18 | 23.00 | 24.46 |
| ABA treatment_Root_1  | 24.72 | 25.62 | 22.30 | 22.89 | 24.13 | 23.99 | 24.62 | 20.05 | 23.12 | 20.47 | 19.85 | 22.63 | 21.65 | 23.51 |
| ABA treatment_Root_2  | 24.50 | 25.85 | 22.44 | 23.00 | 25.57 | 23.46 | 24.53 | 19.69 | 23.09 | 21.36 | 21.00 | 22.61 | 22.54 | 22.58 |
| ABA treatment_Root_3  | 23.00 | 25.41 | 22.50 | 22.54 | 25.41 | 22.06 | 24.09 | 20.11 | 22.51 | 21.58 | 21.10 | 21.47 | 22.24 | 22.27 |
| MeJA treatment_Leaf_1 | 23.40 | 25.64 | 21.71 | 23.06 | 25.28 | 23.96 | 23.90 | 18.79 | 22.58 | 20.17 | 20.84 | 22.21 | 21.82 | 23.63 |
| MeJA treatment_Leaf_2 | 22.92 | 25.14 | 21.57 | 22.71 | 25.72 | 24.28 | 23.53 | 18.45 | 22.16 | 20.58 | 21.28 | 22.78 | 22.73 | 23.88 |
| MeJA treatment_Leaf_3 | 22.85 | 26.56 | 23.06 | 24.02 | 25.33 | 24.06 | 24.75 | 19.11 | 23.80 | 21.01 | 22.10 | 23.33 | 23.28 | 24.67 |
| MeJA treatment_Root_1 | 19.21 | 25.46 | 20.47 | 22.17 | 24.65 | 22.87 | 24.66 | 19.53 | 23.64 | 21.16 | 20.62 | 22.28 | 21.63 | 20.62 |
| MeJA treatment_Root_2 | 19.78 | 24.81 | 20.95 | 22.53 | 24.77 | 22.96 | 25.07 | 19.23 | 22.11 | 21.12 | 20.84 | 22.02 | 22.51 | 22.88 |
| MeJA treatment_Root_3 | 19.55 | 24.78 | 20.49 | 21.34 | 24.44 | 22.44 | 24.26 | 18.93 | 22.89 | 20.97 | 20.60 | 21.89 | 21.84 | 22.81 |

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**Table S3 Cq values of candidate reference genes under different conditions in *G. uralensis* and *G. inflata*.**

| Conditions                                     | <i>ACT</i> | <i>CAC</i> | <i>CYP</i> | <i>DNAJ</i> | <i>DREB</i> | <i>EF1</i> | <i>RAN</i> | <i>TIF1</i> | <i>TUB</i> | <i>UBC2</i> | <i>ABCC2</i> | <i>COPS3</i> | <i>CS</i> | <i>R3HD</i><br><i>M2</i> |
|--|------------|------------|------------|-------------|-------------|------------|------------|-------------|------------|-------------|--------------|--------------|-----------|--------------------------|
| <b><i>G. uralensis</i>_abiotic stresses</b>    |            |            |            |             |             |            |            |             |            |             |              |              |           |                          |
| Control_Leaf                                   | 23.85±     | 25.69±     | 24.34±     | 23.00±      | 26.29±      | 27.40±     | 26.06±     | 20.07±      | 26.41±     | 22.48±      | 23.68±       | 25.88±       | 24.77±    | 26.32±                   |
|  | 1.17       | 0.66       | 0.54       | 0.60        | 0.48        | 1.04       | 0.55       | 0.81        | 0.81       | 0.59        | 0.76         | 0.08         | 0.52      | 0.78                     |
| Control_Root                                   | 24.40±     | 27.30±     | 24.36±     | 24.13±      | 27.80±      | 27.66±     | 26.98±     | 21.42±      | 25.89±     | 23.51±      | 23.63±       | 24.92±       | 25.11±    | 26.24±                   |
|  | 0.46       | 0.31       | 0.44       | 0.30        | 0.31        | 0.33       | 0.39       | 0.44        | 0.37       | 0.30        | 0.27         | 0.22         | 0.33      | 0.30                     |
| Osmotic_Leaf                                   | 25.46±     | 27.03±     | 25.08±     | 25.22±      | 26.83±      | 29.75±     | 27.97±     | 22.45±      | 28.63±     | 24.24±      | 26.37±       | 25.91±       | 27.22±    | 27.93±                   |
|  | 1.58       | 0.93       | 1.08       | 1.33        | 0.59        | 1.89       | 1.42       | 1.36        | 2.00       | 1.00        | 1.67         | 0.73         | 1.45      | 1.48                     |
| Osmotic_Root                                   | 23.10±     | 26.31±     | 23.45±     | 23.21±      | 27.02±      | 26.46±     | 25.92±     | 20.67±      | 24.70±     | 22.84±      | 22.89±       | 25.29±       | 24.23±    | 25.35±                   |
|  | 0.36       | 0.43       | 0.40       | 0.46        | 0.46        | 0.53       | 0.44       | 0.46        | 0.38       | 0.46        | 0.39         | 0.12         | 0.47      | 0.33                     |
| Salt_Leaf                                      | 22.65±     | 25.25±     | 23.51±     | 22.49±      | 25.79±      | 26.05±     | 25.23±     | 19.75±      | 24.41±     | 22.04±      | 22.64±       | 26.57±       | 23.90±    | 25.09±                   |
|  | 0.97       | 0.41       | 0.50       | 0.44        | 0.32        | 0.73       | 0.37       | 0.57        | 0.50       | 0.33        | 0.45         | 1.11         | 0.34      | 0.61                     |
| Salt_Root                                      | 24.12±     | 27.03±     | 25.09±     | 24.63±      | 28.57±      | 28.52±     | 27.82±     | 22.37±      | 26.28±     | 24.43±      | 24.01±       | 25.35±       | 25.52±    | 26.55±                   |
|  | 0.56       | 0.37       | 0.29       | 0.19        | 0.14        | 0.39       | 0.18       | 0.26        | 0.22       | 0.18        | 0.30         | 0.28         | 0.16      | 0.27                     |
| <b><i>G. uralensis</i>_hormonal treatments</b> |            |            |            |             |             |            |            |             |            |             |              |              |           |                          |
| Control_Leaf                                   | 22.21±     | 25.26±     | 22.17±     | 22.27±      | 25.35±      | 26.29±     | 24.05±     | 19.52±      | 23.48±     | 21.18±      | 21.97±       | 24.07±       | 23.31±    | 24.91±                   |
|  | 0.11       | 0.18       | 0.13       | 0.28        | 0.32        | 0.07       | 0.32       | 0.24        | 0.12       | 0.25        | 0.09         | 0.22         | 0.17      | 0.01                     |
| Control_Root                                   | 23.10±     | 26.61±     | 23.93±     | 23.38±      | 26.90±      | 27.10±     | 25.92±     | 21.33±      | 24.33±     | 22.76±      | 22.92±       | 25.07±       | 24.07±    | 25.72±                   |
|  | 0.66       | 0.36       | 0.35       | 0.37        | 0.38        | 0.20       | 0.40       | 0.41        | 0.23       | 0.37        | 0.31         | 0.24         | 0.30      | 0.24                     |
| ABA_Leaf                                       | 22.50±     | 25.76±     | 22.69±     | 22.81±      | 26.02±      | 26.62±     | 24.60±     | 19.73±      | 23.56±     | 21.70±      | 22.66±       | 24.63±       | 23.83±    | 25.44±                   |
|  | 0.14       | 0.09       | 0.10       | 0.11        | 0.06        | 0.21       | 0.11       | 0.06        | 0.08       | 0.08        | 0.09         | 0.06         | 0.08      | 0.08                     |
| ABA_Root                                       | 23.64±     | 27.13±     | 24.28±     | 23.46±      | 27.27±      | 28.27±     | 26.41±     | 21.55±      | 25.26±     | 23.20±      | 23.92±       | 25.05±       | 24.71±    | 26.05±                   |
|  | 0.47       | 0.43       | 0.55       | 0.46        | 0.49        | 0.36       | 0.45       | 0.64        | 0.24       | 0.51        | 0.24         | 0.20         | 0.29      | 0.21                     |

|  |         |        |        |        |        |        |        |        |        |        |        |        |        |        |
|--|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  | 23.26±  | 26.29± | 23.31± | 22.79± | 26.10± | 26.92± | 25.41± | 19.94± | 24.56± | 21.91± | 22.58± | 25.06± | 23.47± | 25.45± |
| MeJA_Leaf                                    | 0.33    | 0.22   | 0.21   | 0.25   | 0.25   | 0.24   | 0.25   | 0.29   | 0.27   | 0.27   | 0.22   | 0.56   | 0.27   | 0.22   |
|  | 22.72±  | 25.85± | 22.92± | 23.03± | 25.76± | 26.74± | 24.88± | 20.10± | 23.63± | 21.96± | 22.56± | 24.61± | 23.95± | 25.48± |
| MeJA_Root                                    | 0.20    | 0.07   | 0.12   | 0.15   | 0.16   | 0.12   | 0.15   | 0.18   | 0.14   | 0.15   | 0.15   | 0.06   | 0.13   | 0.19   |
| <b><i>G. inflata</i>_abiotic stresses</b>    |         |        |        |        |        |        |        |        |        |        |        |        |        |        |
|  | 23.18±  | 25.45± | 23.20± | 22.72± | 25.63± | 25.05± | 24.85± | 19.71± | 24.05± | 20.83± | 21.96± | 23.38± | 23.55± | 23.85± |
| Control_Leaf                                 | 0.24    | 0.08   | 0.08   | 0.05   | 0.28   | 0.09   | 0.06   | 0.25   | 0.06   | 0.23   | 0.31   | 0.05   | 0.27   | 0.11   |
|  | 19.69±  | 26.37± | 24.27± | 22.53± | 25.99± | 24.36± | 26.02± | 19.91± | 24.87± | 21.99± | 21.34± | 23.61± | 23.07± | 23.96± |
| Control_Root                                 | 0.14    | 0.20   | 0.28   | 0.08   | 0.23   | 0.25   | 0.03   | 0.12   | 0.41   | 0.12   | 0.16   | 0.12   | 0.19   | 0.05   |
|  | 20.06±  | 25.36± | 22.76± | 22.56± | 26.25± | 24.97± | 24.21± | 19.22± | 23.52± | 21.44± | 22.46± | 23.26± | 23.69± | 23.48± |
| Osmotic_Leaf                                 | 1.21    | 0.26   | 0.23   | 0.20   | 0.28   | 0.33   | 0.29   | 0.26   | 0.20   | 0.33   | 0.19   | 0.19   | 0.16   | 0.17   |
|  | 20.17±  | 25.13± | 22.76± | 21.17± | 24.70± | 23.22± | 24.49± | 18.64± | 23.07± | 20.91± | 20.46± | 22.39± | 22.43± | 22.79± |
| Osmotic_Root                                 | 0.4     | 0.11   | 0.04   | 0.11   | 0.04   | 0.19   | 0.18   | 0.06   | 0.27   | 0.03   | 0.06   | 0.18   | 0.04   | 0.07   |
|  | 19.6±0. | 26.28± | 24.00± | 23.68± | 27.34± | 24.88± | 25.22± | 25.34± | 24.46± | 23.15± | 23.93± | 23.58± | 25.26± | 23.83± |
| Salt_Leaf                                    | 66      | 0.36   | 0.42   | 0.33   | 0.09   | 0.42   | 0.35   | 0.34   | 0.36   | 0.25   | 0.29   | 0.34   | 0.38   | 0.31   |
|  | 22.60±  | 25.90± | 24.41± | 22.25± | 24.86± | 23.75± | 25.22± | 24.83± | 23.91± | 22.70± | 21.78± | 22.69± | 23.63± | 22.92± |
| Salt_Root                                    | 1.20    | 0.13   | 0.25   | 0.16   | 0.93   | 0.08   | 0.13   | 0.12   | 0.26   | 0.51   | 0.14   | 0.09   | 0.19   | 0.07   |
| <b><i>G. inflata</i>_hormonal treatments</b> |         |        |        |        |        |        |        |        |        |        |        |        |        |        |
|  | 17.40±  | 25.70± | 22.12± | 23.14± | 24.70± | 23.12± | 24.05± | 18.43± | 22.75± | 20.51± | 21.91± | 22.27± | 22.87± | 23.35± |
| Control_Leaf                                 | 0.21    | 0.25   | 0.19   | 0.28   | 0.24   | 0.10   | 0.25   | 0.24   | 0.15   | 0.23   | 0.27   | 0.12   | 0.21   | 0.12   |
|  | 19.18±  | 25.14± | 21.77± | 22.00± | 25.00± | 21.64± | 24.54± | 19.01± | 22.55± | 21.15± | 20.63± | 21.53± | 21.88± | 22.50± |
| Control_Root                                 | 0.37    | 0.55   | 0.28   | 0.63   | 0.41   | 0.52   | 0.59   | 0.54   | 0.48   | 0.49   | 0.44   | 0.38   | 0.44   | 0.36   |
|  | 19.04±  | 25.68± | 22.85± | 23.75± | 24.75± | 25.00± | 24.71± | 18.98± | 23.58± | 20.52± | 21.79± | 22.97± | 23.08± | 24.21± |
| ABA_Leaf                                     | 0.39    | 0.28   | 0.19   | 0.24   | 0.04   | 0.12   | 0.22   | 0.24   | 0.26   | 0.01   | 0.00   | 0.06   | 0.03   | 0.07   |
|  | 24.08±  | 25.63± | 22.41± | 22.81± | 25.04± | 23.17± | 24.41± | 19.95± | 22.91± | 21.14± | 20.65± | 22.24± | 22.14± | 22.79± |
| ABA_Root                                     | 0.31    | 0.07   | 0.03   | 0.08   | 0.26   | 0.33   | 0.09   | 0.08   | 0.11   | 0.20   | 0.23   | 0.22   | 0.15   | 0.22   |

|           |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|           | 23.06± | 25.78± | 22.11± | 23.26± | 25.44± | 24.10± | 24.06± | 18.78± | 22.85± | 20.59± | 21.41± | 22.77± | 22.61± | 24.06± |
| MeJA_Leaf | 0.10   | 0.24   | 0.28   | 0.22   | 0.08   | 0.05   | 0.21   | 0.11   | 0.28   | 0.14   | 0.21   | 0.19   | 0.25   | 0.18   |
|           | 19.51± | 25.02± | 20.64± | 22.01± | 24.62± | 22.76± | 24.66± | 19.23± | 22.88± | 21.09± | 20.69± | 22.06± | 21.99± | 22.10± |
| MeJA_Root | 0.10   | 0.13   | 0.09   | 0.20   | 0.06   | 0.09   | 0.14   | 0.10   | 0.26   | 0.03   | 0.05   | 0.07   | 0.15   | 0.43   |

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**Table S4 Stability of candidate reference genes under different conditions in *G. uralensis*.**

| Candidate genes     | geNorm    |         | NormFinder |         | BestKeeper |         | $\Delta$ Ct method |         | RefFinder method |         |
|---------------------|-----------|---------|------------|---------|------------|---------|--------------------|---------|------------------|---------|
|                     | Stability | Ranking | Stability  | Ranking | Stability  | Ranking | Stability          | Ranking | Stability        | Ranking |
| <b>Control_Leaf</b> |           |         |            |         |            |         |                    |         |                  |         |
| <i>ACT</i>          | 0.935     | 13      | 1.298      | 14      | 1.87       | 13      | 1.43               | 13      | 13.24            | 14      |
| <i>CAC</i>          | 0.421     | 5       | 0.7        | 9       | 0.92       | 3       | 0.95               | 9       | 5.9              | 6       |
| <i>CYP</i>          | 0.607     | 8       | 0.477      | 5       | 1.33       | 9       | 0.89               | 6       | 6.82             | 8       |
| <i>DNAJ</i>         | 0.313     | 1       | 0.623      | 6       | 1          | 4       | 0.89               | 4       | 3.13             | 2       |
| <i>DREB</i>         | 0.313     | 1       | 0.638      | 8       | 0.91       | 2       | 0.9                | 7       | 3.25             | 3       |
| <i>EF1</i>          | 0.762     | 11      | 0.888      | 11      | 1.56       | 12      | 1.12               | 11      | 11.24            | 12      |
| <i>RAN</i>          | 0.494     | 6       | 0.704      | 10      | 1.19       | 7       | 0.97               | 10      | 8.05             | 11      |
| <i>TIF1</i>         | 0.652     | 9       | 0.625      | 7       | 1.2        | 8       | 0.95               | 8       | 7.97             | 10      |
| <i>TUB</i>          | 0.855     | 12      | 1.142      | 12      | 1.91       | 14      | 1.32               | 12      | 12.47            | 13      |
| <i>UBC2</i>         | 0.335     | 3       | 0.44       | 3       | 1.02       | 5       | 0.8                | 3       | 3.41             | 4       |
| <i>ABCC2</i>        | 0.562     | 7       | 0.192      | 1       | 1.42       | 11      | 0.79               | 2       | 3.52             | 5       |
| <i>COPS3</i>        | 1.007     | 14      | 1.292      | 13      | 0.9        | 1       | 1.44               | 14      | 7.1              | 9       |
| <i>CS</i>           | 0.368     | 4       | 0.277      | 2       | 1.04       | 6       | 0.76               | 1       | 2.63             | 1       |
| <i>R3HDM2</i>       | 0.695     | 10      | 0.465      | 4       | 1.37       | 10      | 0.89               | 5       | 6.69             | 7       |
| <b>Control_Root</b> |           |         |            |         |            |         |                    |         |                  |         |
| <i>ACT</i>          | 0.542     | 13      | 1.088      | 13      | 1.35       | 14      | 1.14               | 13      | 13.24            | 14      |
| <i>CAC</i>          | 0.068     | 3       | 0.123      | 2       | 0.89       | 7       | 0.46               | 2       | 3.03             | 3       |
| <i>CYP</i>          | 0.411     | 11      | 0.471      | 10      | 0.86       | 6       | 0.67               | 10      | 9.01             | 11      |
| <i>DNAJ</i>         | 0.032     | 1       | 0.113      | 1       | 0.89       | 8       | 0.45               | 1       | 1.68             | 1       |
| <i>DREB</i>         | 0.1       | 4       | 0.209      | 4       | 0.96       | 12      | 0.49               | 4       | 5.26             | 6       |
| <i>EF1</i>          | 0.335     | 9       | 0.327      | 9       | 0.63       | 2       | 0.59               | 9       | 6.18             | 7       |
| <i>RAN</i>          | 0.166     | 5       | 0.285      | 7       | 1.08       | 13      | 0.54               | 7       | 7.51             | 10      |

|                     |       |    |       |    |      |    |      |    |       |    |
|---------------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>TIF1</i>         | 0.446 | 12 | 0.51  | 12 | 0.95 | 11 | 0.7  | 12 | 11.74 | 13 |
| <i>TUB</i>          | 0.376 | 10 | 0.51  | 11 | 0.94 | 10 | 0.69 | 11 | 10.49 | 12 |
| <i>UBC2</i>         | 0.032 | 1  | 0.14  | 3  | 0.9  | 9  | 0.46 | 3  | 3     | 2  |
| <i>ABCC2</i>        | 0.225 | 6  | 0.256 | 5  | 0.75 | 4  | 0.51 | 5  | 4.95  | 4  |
| <i>COPS3</i>        | 0.645 | 14 | 1.212 | 14 | 0.47 | 1  | 1.26 | 14 | 7.24  | 9  |
| <i>CS</i>           | 0.288 | 8  | 0.316 | 8  | 0.85 | 5  | 0.55 | 8  | 7.11  | 8  |
| <i>R3HDM2</i>       | 0.263 | 7  | 0.273 | 6  | 0.68 | 3  | 0.53 | 6  | 5.24  | 5  |
| <b>Osmotic_Leaf</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>          | 1.226 | 12 | 1.498 | 11 | 3.1  | 13 | 1.8  | 12 | 11.98 | 14 |
| <i>CAC</i>          | 0.808 | 6  | 0.885 | 8  | 1.89 | 4  | 1.35 | 9  | 6.45  | 8  |
| <i>CYP</i>          | 0.858 | 7  | 1.995 | 14 | 1.76 | 3  | 1.29 | 7  | 5.45  | 6  |
| <i>DNAJ</i>         | 0.274 | 1  | 0.664 | 5  | 2.27 | 6  | 1.15 | 1  | 2.55  | 2  |
| <i>DREB</i>         | 1.352 | 13 | 0.707 | 6  | 1.23 | 2  | 1.95 | 13 | 8.14  | 10 |
| <i>EF1</i>          | 1.059 | 10 | 0.526 | 3  | 3.19 | 14 | 1.68 | 10 | 10.88 | 12 |
| <i>RAN</i>          | 0.274 | 1  | 1.786 | 13 | 2.27 | 7  | 1.22 | 5  | 3.31  | 3  |
| <i>TIF1</i>         | 0.532 | 4  | 1.452 | 10 | 2.38 | 9  | 1.15 | 1  | 2.45  | 1  |
| <i>TUB</i>          | 1.142 | 11 | 0.481 | 2  | 2.9  | 12 | 1.77 | 11 | 11.49 | 13 |
| <i>UBC2</i>         | 0.707 | 5  | 0.655 | 4  | 1.97 | 5  | 1.26 | 6  | 5.69  | 7  |
| <i>ABCC2</i>        | 0.945 | 9  | 0.438 | 1  | 2.74 | 11 | 1.33 | 8  | 9.19  | 11 |
| <i>COPS3</i>        | 1.465 | 14 | 1.576 | 12 | 0.92 | 1  | 2.14 | 14 | 7.24  | 9  |
| <i>CS</i>           | 0.325 | 3  | 0.71  | 7  | 2.3  | 8  | 1.21 | 4  | 4.68  | 5  |
| <i>R3HDM2</i>       | 0.902 | 8  | 0.944 | 9  | 2.48 | 10 | 1.19 | 3  | 4.68  | 4  |
| <b>Osmotic_Root</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>          | 0.324 | 12 | 0.402 | 12 | 1.09 | 12 | 0.52 | 12 | 12    | 13 |
| <i>CAC</i>          | 0.087 | 1  | 0.14  | 3  | 0.96 | 6  | 0.35 | 1  | 2.45  | 2  |
| <i>CYP</i>          | 0.269 | 10 | 0.299 | 10 | 0.99 | 9  | 0.47 | 10 | 9.74  | 11 |

|                  |       |    |       |    |      |    |      |    |       |    |
|------------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>DNAJ</i>      | 0.087 | 1  | 0.123 | 1  | 0.97 | 7  | 0.35 | 1  | 1.63  | 1  |
| <i>DREB</i>      | 0.117 | 3  | 0.135 | 2  | 0.94 | 4  | 0.36 | 3  | 2.91  | 3  |
| <i>EF1</i>       | 0.3   | 11 | 0.396 | 11 | 1.12 | 13 | 0.52 | 11 | 11.47 | 12 |
| <i>RAN</i>       | 0.221 | 8  | 0.187 | 5  | 1.06 | 11 | 0.38 | 4  | 6.48  | 7  |
| <i>TIF1</i>      | 0.356 | 13 | 0.472 | 13 | 1.13 | 14 | 0.6  | 13 | 13.24 | 14 |
| <i>TUB</i>       | 0.238 | 9  | 0.187 | 6  | 1    | 10 | 0.39 | 6  | 7.54  | 10 |
| <i>UBC2</i>      | 0.143 | 5  | 0.183 | 4  | 0.95 | 5  | 0.39 | 5  | 4.73  | 4  |
| <i>ABCC2</i>     | 0.168 | 6  | 0.23  | 7  | 0.85 | 3  | 0.42 | 8  | 5.63  | 5  |
| <i>COPS3</i>     | 0.496 | 14 | 1.31  | 14 | 0.35 | 1  | 1.34 | 14 | 7.24  | 9  |
| <i>CS</i>        | 0.122 | 4  | 0.233 | 8  | 0.98 | 8  | 0.39 | 7  | 6.51  | 8  |
| <i>R3HDM2</i>    | 0.197 | 7  | 0.246 | 9  | 0.84 | 2  | 0.44 | 9  | 5.8   | 6  |
| <b>Salt_Leaf</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>       | 0.904 | 13 | 1.625 | 13 | 2.45 | 14 | 1.75 | 13 | 13.24 | 14 |
| <i>CAC</i>       | 0.142 | 1  | 0.538 | 5  | 1.13 | 6  | 0.85 | 4  | 3.31  | 3  |
| <i>CYP</i>       | 0.353 | 7  | 0.325 | 2  | 1.18 | 7  | 0.82 | 1  | 3.15  | 2  |
| <i>DNAJ</i>      | 0.142 | 1  | 0.54  | 6  | 1.11 | 5  | 0.84 | 3  | 3.08  | 1  |
| <i>DREB</i>      | 0.309 | 6  | 0.598 | 9  | 0.85 | 1  | 0.91 | 8  | 4.56  | 5  |
| <i>EF1</i>       | 0.759 | 12 | 0.947 | 12 | 2.03 | 13 | 1.22 | 12 | 12.24 | 13 |
| <i>RAN</i>       | 0.243 | 4  | 0.664 | 10 | 0.94 | 2  | 0.9  | 7  | 4.86  | 7  |
| <i>TIF1</i>      | 0.512 | 9  | 0.437 | 3  | 1.54 | 10 | 0.96 | 10 | 7.21  | 9  |
| <i>TUB</i>       | 0.683 | 11 | 0.891 | 11 | 1.71 | 12 | 1.18 | 11 | 11.24 | 11 |
| <i>UBC2</i>      | 0.201 | 3  | 0.597 | 8  | 0.97 | 4  | 0.87 | 6  | 4.9   | 8  |
| <i>ABCC2</i>     | 0.413 | 8  | 0.291 | 1  | 1.37 | 9  | 0.83 | 2  | 3.46  | 4  |
| <i>COPS3</i>     | 1.075 | 14 | 1.974 | 14 | 1.31 | 8  | 2.1  | 14 | 12.17 | 12 |
| <i>CS</i>        | 0.276 | 5  | 0.553 | 7  | 0.95 | 3  | 0.86 | 5  | 4.79  | 6  |
| <i>R3HDM2</i>    | 0.591 | 10 | 0.496 | 4  | 1.6  | 11 | 0.96 | 9  | 7.93  | 10 |

**Salt\_Root**

|               |       |    |       |    |      |    |      |    |       |    |
|---------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>ACT</i>    | 0.708 | 14 | 1.28  | 14 | 1.09 | 14 | 1.35 | 14 | 14    | 14 |
| <i>CAC</i>    | 0.601 | 13 | 1.064 | 13 | 0.77 | 10 | 1.16 | 13 | 12.17 | 13 |
| <i>CYP</i>    | 0.35  | 9  | 0.395 | 9  | 0.8  | 12 | 0.62 | 9  | 9.67  | 10 |
| <i>DNAJ</i>   | 0.183 | 3  | 0.07  | 1  | 0.55 | 3  | 0.49 | 1  | 1.86  | 2  |
| <i>DREB</i>   | 0.127 | 1  | 0.115 | 3  | 0.51 | 1  | 0.51 | 2  | 1.73  | 1  |
| <i>EF1</i>    | 0.403 | 11 | 0.533 | 11 | 0.92 | 13 | 0.72 | 11 | 11.47 | 12 |
| <i>RAN</i>    | 0.317 | 8  | 0.283 | 6  | 0.59 | 6  | 0.57 | 6  | 6.45  | 6  |
| <i>TIF1</i>   | 0.371 | 10 | 0.439 | 10 | 0.78 | 11 | 0.64 | 10 | 10.24 | 11 |
| <i>TUB</i>    | 0.237 | 5  | 0.096 | 2  | 0.67 | 9  | 0.51 | 2  | 3.66  | 4  |
| <i>UBC2</i>   | 0.127 | 1  | 0.237 | 5  | 0.55 | 3  | 0.54 | 5  | 2.94  | 3  |
| <i>ABCC2</i>  | 0.288 | 7  | 0.371 | 8  | 0.65 | 8  | 0.61 | 8  | 7.74  | 9  |
| <i>COPS3</i>  | 0.507 | 12 | 0.973 | 12 | 0.52 | 2  | 1.09 | 12 | 7.67  | 8  |
| <i>CS</i>     | 0.21  | 4  | 0.121 | 4  | 0.56 | 5  | 0.52 | 4  | 4.23  | 5  |
| <i>R3HDM2</i> | 0.273 | 6  | 0.332 | 7  | 0.64 | 7  | 0.59 | 7  | 6.74  | 7  |

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**ABA\_Leaf**

|             |       |    |       |    |      |    |      |    |       |    |
|-------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>ACT</i>  | 0.3   | 10 | 0.293 | 8  | 0.31 | 4  | 0.42 | 9  | 7.33  | 9  |
| <i>CAC</i>  | 0.17  | 3  | 0.123 | 2  | 0.35 | 9  | 0.33 | 2  | 3.22  | 2  |
| <i>CYP</i>  | 0.274 | 9  | 0.191 | 4  | 0.32 | 5  | 0.37 | 5  | 5.73  | 7  |
| <i>DNAJ</i> | 0.205 | 5  | 0.302 | 9  | 0.46 | 12 | 0.39 | 8  | 8.11  | 10 |
| <i>DREB</i> | 0.226 | 7  | 0.406 | 11 | 0.48 | 14 | 0.47 | 11 | 10.44 | 12 |
| <i>EF1</i>  | 0.357 | 12 | 0.451 | 12 | 0.33 | 7  | 0.54 | 12 | 10.49 | 13 |
| <i>RAN</i>  | 0.217 | 6  | 0.383 | 10 | 0.47 | 13 | 0.45 | 10 | 9.4   | 11 |
| <i>TIF1</i> | 0.191 | 4  | 0.254 | 7  | 0.32 | 6  | 0.39 | 6  | 5.38  | 5  |
| <i>TUB</i>  | 0.396 | 13 | 0.557 | 14 | 0.23 | 1  | 0.61 | 13 | 6.97  | 8  |
| <i>UBC2</i> | 0.144 | 1  | 0.216 | 5  | 0.36 | 10 | 0.35 | 4  | 3.76  | 3  |

|                  |       |    |       |    |      |    |      |    |       |    |
|------------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>ABCC2</i>     | 0.254 | 8  | 0.134 | 3  | 0.34 | 8  | 0.35 | 3  | 4.9   | 4  |
| <i>COPS3</i>     | 0.428 | 14 | 0.546 | 13 | 0.43 | 11 | 0.62 | 14 | 12.94 | 14 |
| <i>CS</i>        | 0.144 | 1  | 0.014 | 1  | 0.29 | 3  | 0.32 | 1  | 1.32  | 1  |
| <i>R3HDM2</i>    | 0.317 | 11 | 0.235 | 6  | 0.27 | 2  | 0.39 | 7  | 5.51  | 6  |
| <b>ABA_Root</b>  |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>       | 0.658 | 14 | 1     | 14 | 1.15 | 13 | 1.07 | 14 | 13.74 | 14 |
| <i>CAC</i>       | 0.129 | 1  | 0.064 | 1  | 0.89 | 7  | 0.47 | 1  | 1.63  | 1  |
| <i>CYP</i>       | 0.489 | 11 | 0.488 | 10 | 0.94 | 9  | 0.68 | 10 | 9.97  | 12 |
| <i>DNAJ</i>      | 0.194 | 5  | 0.298 | 5  | 0.9  | 8  | 0.55 | 5  | 5.62  | 7  |
| <i>DREB</i>      | 0.165 | 4  | 0.286 | 4  | 0.97 | 11 | 0.53 | 4  | 5.15  | 5  |
| <i>EF1</i>       | 0.464 | 10 | 0.51  | 11 | 0.76 | 5  | 0.68 | 11 | 9.23  | 11 |
| <i>RAN</i>       | 0.129 | 1  | 0.208 | 2  | 0.96 | 10 | 0.5  | 2  | 2.51  | 2  |
| <i>TIF1</i>      | 0.517 | 12 | 0.589 | 12 | 1.19 | 14 | 0.72 | 12 | 12.47 | 13 |
| <i>TUB</i>       | 0.416 | 8  | 0.413 | 8  | 0.61 | 3  | 0.61 | 7  | 6.05  | 8  |
| <i>UBC2</i>      | 0.151 | 3  | 0.267 | 3  | 0.99 | 12 | 0.52 | 3  | 4.24  | 3  |
| <i>ABCC2</i>     | 0.441 | 9  | 0.484 | 9  | 0.76 | 6  | 0.65 | 9  | 7.77  | 9  |
| <i>COPS3</i>     | 0.59  | 13 | 0.98  | 13 | 0.5  | 1  | 1.05 | 13 | 8.14  | 10 |
| <i>CS</i>        | 0.309 | 6  | 0.318 | 6  | 0.7  | 4  | 0.56 | 6  | 5.42  | 6  |
| <i>R3HDM2</i>    | 0.376 | 7  | 0.392 | 7  | 0.5  | 1  | 0.62 | 8  | 4.45  | 4  |
| <b>MeJA_Leaf</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>       | 0.388 | 7  | 0.382 | 8  | 0.73 | 12 | 0.58 | 7  | 8.28  | 10 |
| <i>CAC</i>       | 0.271 | 4  | 0.147 | 2  | 0.6  | 7  | 0.5  | 1  | 3.25  | 3  |
| <i>CYP</i>       | 0.369 | 6  | 0.276 | 3  | 0.62 | 8  | 0.55 | 4  | 4.9   | 5  |
| <i>DNAJ</i>      | 0.203 | 3  | 0.346 | 6  | 0.62 | 9  | 0.56 | 5  | 5.33  | 7  |
| <i>DREB</i>      | 0.16  | 1  | 0.417 | 9  | 0.62 | 10 | 0.6  | 8  | 5.18  | 6  |
| <i>EF1</i>       | 0.443 | 10 | 0.361 | 7  | 0.47 | 3  | 0.61 | 9  | 6.59  | 8  |

|                  |       |    |       |    |      |    |      |    |       |    |
|------------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>RAN</i>       | 0.478 | 12 | 0.51  | 12 | 0.8  | 13 | 0.68 | 12 | 12.24 | 12 |
| <i>TIF1</i>      | 0.46  | 11 | 0.487 | 11 | 0.53 | 5  | 0.67 | 11 | 9.03  | 11 |
| <i>TUB</i>       | 0.509 | 13 | 0.597 | 13 | 0.65 | 11 | 0.75 | 13 | 12.47 | 13 |
| <i>UBC2</i>      | 0.16  | 1  | 0.29  | 4  | 0.57 | 6  | 0.53 | 3  | 2.91  | 2  |
| <i>ABCC2</i>     | 0.332 | 5  | 0.101 | 1  | 0.46 | 2  | 0.5  | 1  | 1.78  | 1  |
| <i>COPS3</i>     | 0.67  | 14 | 1.592 | 14 | 0.87 | 14 | 1.64 | 14 | 14    | 14 |
| <i>CS</i>        | 0.429 | 9  | 0.423 | 10 | 0.51 | 4  | 0.63 | 10 | 7.75  | 9  |
| <i>R3HDM2</i>    | 0.412 | 8  | 0.32  | 5  | 0.43 | 1  | 0.58 | 6  | 3.94  | 4  |
| <b>MeJA_Root</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>       | 0.575 | 14 | 1.02  | 14 | 0.98 | 14 | 1.06 | 14 | 14    | 14 |
| <i>CAC</i>       | 0.324 | 7  | 0.123 | 1  | 0.54 | 7  | 0.44 | 1  | 2.65  | 1  |
| <i>CYP</i>       | 0.409 | 11 | 0.427 | 11 | 0.72 | 13 | 0.59 | 11 | 11.47 | 12 |
| <i>DNAJ</i>      | 0.294 | 6  | 0.198 | 4  | 0.57 | 8  | 0.47 | 5  | 5.57  | 7  |
| <i>DREB</i>      | 0.388 | 10 | 0.372 | 9  | 0.63 | 10 | 0.53 | 8  | 9.43  | 11 |
| <i>EF1</i>       | 0.203 | 3  | 0.33  | 7  | 0.35 | 1  | 0.51 | 7  | 4.14  | 4  |
| <i>RAN</i>       | 0.365 | 9  | 0.296 | 6  | 0.63 | 10 | 0.5  | 6  | 7.54  | 10 |
| <i>TIF1</i>      | 0.43  | 12 | 0.485 | 12 | 0.68 | 12 | 0.61 | 12 | 12    | 13 |
| <i>TUB</i>       | 0.252 | 5  | 0.139 | 2  | 0.45 | 4  | 0.44 | 1  | 3.31  | 2  |
| <i>UBC2</i>      | 0.343 | 8  | 0.166 | 3  | 0.59 | 9  | 0.44 | 1  | 4.56  | 6  |
| <i>ABCC2</i>     | 0.157 | 1  | 0.211 | 5  | 0.46 | 6  | 0.45 | 4  | 3.31  | 3  |
| <i>COPS3</i>     | 0.494 | 13 | 0.86  | 13 | 0.35 | 1  | 0.91 | 13 | 6.85  | 9  |
| <i>CS</i>        | 0.157 | 1  | 0.37  | 8  | 0.45 | 4  | 0.53 | 8  | 4.36  | 5  |
| <i>R3HDM2</i>    | 0.226 | 4  | 0.396 | 10 | 0.43 | 3  | 0.56 | 10 | 5.89  | 8  |

**Table S5 Stability of candidate reference genes under different conditions in *G. inflata*.**

| Candidate genes     | geNorm    |         | NormFinder |         | BestKeeper |         | $\Delta$ Ct method |         | RefFinder method |         |
|---------------------|-----------|---------|------------|---------|------------|---------|--------------------|---------|------------------|---------|
|                     | Stability | Ranking | Stability  | Ranking | Stability  | Ranking | Stability          | Ranking | Stability        | Ranking |
| <b>Control_Leaf</b> |           |         |            |         |            |         |                    |         |                  |         |
| <i>ACT</i>          | 0.958     | 14      | 2.821      | 14      | 2.89       | 14      | 2.84               | 14      | 14               | 14      |
| <i>CAC</i>          | 0.573     | 11      | 0.762      | 12      | 0.4        | 2       | 0.92               | 11      | 7.34             | 9       |
| <i>CYP</i>          | 0.244     | 3       | 0.288      | 4       | 0.54       | 6       | 0.77               | 7       | 4.74             | 4       |
| <i>DNAJ</i>         | 0.607     | 12      | 0.899      | 13      | 0.46       | 3       | 1.02               | 13      | 8.83             | 11      |
| <i>DREB</i>         | 0.381     | 5       | 0.294      | 5       | 0.7        | 12      | 0.74               | 5       | 6.22             | 7       |
| <i>EF1</i>          | 0.644     | 13      | 0.541      | 9       | 0.97       | 13      | 0.95               | 12      | 11.62            | 13      |
| <i>RAN</i>          | 0.283     | 4       | 0.149      | 3       | 0.46       | 4       | 0.68               | 1       | 2.63             | 3       |
| <i>TIF1</i>         | 0.463     | 8       | 0.303      | 6       | 0.64       | 10      | 0.81               | 8       | 7.87             | 10      |
| <i>TUB</i>          | 0.135     | 1       | 0.068      | 1       | 0.65       | 11      | 0.71               | 3       | 2.4              | 2       |
| <i>UBC2</i>         | 0.439     | 7       | 0.456      | 8       | 0.51       | 5       | 0.75               | 6       | 6.4              | 8       |
| <i>ABCC2</i>        | 0.543     | 10      | 0.736      | 11      | 0.63       | 8       | 0.91               | 10      | 9.97             | 12      |
| <i>COPS3</i>        | 0.135     | 1       | 0.068      | 2       | 0.56       | 7       | 0.69               | 2       | 2.3              | 1       |
| <i>CS</i>           | 0.411     | 6       | 0.342      | 7       | 0.63       | 9       | 0.73               | 4       | 6.05             | 6       |
| <i>R3HDM2</i>       | 0.506     | 9       | 0.568      | 10      | 0.31       | 1       | 0.88               | 9       | 5.33             | 5       |
| <b>Control_Root</b> |           |         |            |         |            |         |                    |         |                  |         |
| <i>ACT</i>          | 0.612     | 11      | 0.829      | 12      | 0.57       | 1       | 0.96               | 12      | 6.31             | 7       |
| <i>CAC</i>          | 0.228     | 1       | 0.269      | 2       | 0.94       | 9       | 0.62               | 2       | 2.45             | 2       |
| <i>CYP</i>          | 0.765     | 14      | 0.862      | 14      | 1.25       | 12      | 0.99               | 14      | 13.47            | 14      |
| <i>DNAJ</i>         | 0.53      | 9       | 0.722      | 10      | 0.81       | 6       | 0.86               | 10      | 8.57             | 11      |
| <i>DREB</i>         | 0.431     | 5       | 0.454      | 8       | 0.87       | 8       | 0.7                | 8       | 7.11             | 8       |
| <i>EF1</i>          | 0.68      | 12      | 0.822      | 11      | 1.42       | 14      | 0.95               | 11      | 11.94            | 12      |
| <i>RAN</i>          | 0.483     | 7       | 0.42       | 7       | 1.09       | 11      | 0.69               | 6       | 7.54             | 9       |

|                     |       |    |       |    |      |    |      |    |       |    |
|---------------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>TIF1</i>         | 0.455 | 6  | 0.406 | 4  | 0.76 | 4  | 0.67 | 5  | 4.68  | 5  |
| <i>TUB</i>          | 0.727 | 13 | 0.836 | 13 | 1.3  | 13 | 0.97 | 13 | 13    | 13 |
| <i>UBC2</i>         | 0.399 | 4  | 0.408 | 5  | 0.79 | 5  | 0.65 | 4  | 4.47  | 4  |
| <i>ABCC2</i>        | 0.365 | 3  | 0.517 | 9  | 0.74 | 2  | 0.73 | 9  | 4.7   | 6  |
| <i>COPS3</i>        | 0.564 | 10 | 0.413 | 6  | 1.04 | 10 | 0.7  | 7  | 8.05  | 10 |
| <i>CS</i>           | 0.228 | 1  | 0.112 | 1  | 0.83 | 7  | 0.58 | 1  | 1.63  | 1  |
| <i>R3HDM2</i>       | 0.502 | 8  | 0.314 | 3  | 0.75 | 3  | 0.65 | 3  | 3.83  | 3  |
| <b>Osmotic_Leaf</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>          | 0.959 | 14 | 2.807 | 14 | 2.43 | 14 | 2.83 | 14 | 14    | 14 |
| <i>CAC</i>          | 0.3   | 5  | 0.356 | 5  | 0.4  | 4  | 0.81 | 7  | 5.62  | 6  |
| <i>CYP</i>          | 0.255 | 3  | 0.375 | 7  | 0.42 | 6  | 0.82 | 9  | 5.8   | 7  |
| <i>DNAJ</i>         | 0.276 | 4  | 0.185 | 2  | 0.28 | 1  | 0.74 | 3  | 2.63  | 3  |
| <i>DREB</i>         | 0.611 | 12 | 0.704 | 12 | 0.59 | 12 | 0.9  | 12 | 12    | 12 |
| <i>EF1</i>          | 0.555 | 10 | 0.555 | 10 | 0.46 | 8  | 0.84 | 10 | 9.46  | 10 |
| <i>RAN</i>          | 0.204 | 1  | 0.26  | 3  | 0.51 | 9  | 0.8  | 6  | 3.57  | 4  |
| <i>TIF1</i>         | 0.493 | 8  | 0.415 | 8  | 0.55 | 11 | 0.81 | 7  | 8.38  | 9  |
| <i>TUB</i>          | 0.204 | 2  | 0.092 | 1  | 0.4  | 4  | 0.73 | 1  | 1.68  | 1  |
| <i>UBC2</i>         | 0.648 | 13 | 0.951 | 13 | 0.6  | 13 | 1.05 | 13 | 13    | 13 |
| <i>ABCC2</i>        | 0.588 | 11 | 0.652 | 11 | 0.54 | 10 | 0.87 | 11 | 10.74 | 11 |
| <i>COPS3</i>        | 0.441 | 7  | 0.363 | 6  | 0.28 | 1  | 0.73 | 1  | 2.55  | 2  |
| <i>CS</i>           | 0.53  | 9  | 0.472 | 9  | 0.45 | 7  | 0.77 | 5  | 7.3   | 8  |
| <i>R3HDM2</i>       | 0.393 | 6  | 0.29  | 4  | 0.34 | 3  | 0.74 | 3  | 4.12  | 5  |
| <b>Osmotic_Root</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>          | 0.629 | 14 | 1.226 | 14 | 0.64 | 8  | 1.27 | 14 | 12.54 | 13 |
| <i>CAC</i>          | 0.377 | 8  | 0.343 | 9  | 0.62 | 7  | 0.57 | 8  | 7.97  | 8  |
| <i>CYP</i>          | 0.394 | 9  | 0.342 | 8  | 0.75 | 12 | 0.56 | 7  | 8.82  | 10 |



|               |       |    |       |    |      |    |      |    |       |    |
|---------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>DNAJ</i>   | 0.436 | 11 | 0.507 | 11 | 0.68 | 10 | 0.66 | 11 | 10.74 | 11 |
| <i>DREB</i>   | 0.249 | 4  | 0.371 | 10 | 0.7  | 11 | 0.58 | 10 | 8.14  | 9  |
| <i>EF1</i>    | 0.407 | 10 | 0.338 | 7  | 0.58 | 4  | 0.57 | 9  | 7.09  | 7  |
| <i>RAN</i>    | 0.459 | 12 | 0.558 | 12 | 0.77 | 13 | 0.69 | 12 | 12.24 | 12 |
| <i>TIF1</i>   | 0.159 | 1  | 0.08  | 1  | 0.64 | 9  | 0.44 | 1  | 1.68  | 1  |
| <i>TUB</i>    | 0.521 | 13 | 0.843 | 13 | 0.97 | 14 | 0.92 | 13 | 13.24 | 14 |
| <i>UBC2</i>   | 0.193 | 3  | 0.221 | 4  | 0.54 | 3  | 0.5  | 4  | 3.46  | 4  |
| <i>ABCC2</i>  | 0.323 | 6  | 0.171 | 3  | 0.44 | 2  | 0.49 | 3  | 3.22  | 3  |
| <i>COPS3</i>  | 0.289 | 5  | 0.273 | 5  | 0.61 | 6  | 0.53 | 5  | 5.23  | 6  |
| <i>CS</i>     | 0.353 | 7  | 0.308 | 6  | 0.36 | 1  | 0.56 | 6  | 3.98  | 5  |
| <i>R3HDM2</i> | 0.159 | 1  | 0.153 | 2  | 0.59 | 5  | 0.47 | 2  | 2.11  | 2  |

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**Salt\_Leaf**

|               |       |    |       |    |      |    |      |    |       |    |
|---------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>ACT</i>    | 1.415 | 14 | 3.093 | 14 | 1.86 | 13 | 3.16 | 14 | 13.74 | 14 |
| <i>CAC</i>    | 0.211 | 3  | 0.392 | 1  | 0.69 | 6  | 1.03 | 1  | 2.06  | 1  |
| <i>CYP</i>    | 0.287 | 5  | 0.64  | 9  | 0.74 | 8  | 1.14 | 6  | 6.82  | 7  |
| <i>DNAJ</i>   | 0.249 | 4  | 0.44  | 3  | 0.7  | 7  | 1.06 | 2  | 3.6   | 5  |
| <i>DREB</i>   | 0.706 | 9  | 0.559 | 5  | 0.86 | 9  | 1.18 | 8  | 7.54  | 8  |
| <i>EF1</i>    | 0.607 | 8  | 0.74  | 11 | 0.59 | 5  | 1.26 | 11 | 8.34  | 9  |
| <i>RAN</i>    | 0.096 | 1  | 0.577 | 6  | 0.52 | 3  | 1.09 | 3  | 2.71  | 2  |
| <i>TIF1</i>   | 1.124 | 13 | 2.784 | 13 | 2.82 | 14 | 2.85 | 13 | 13.24 | 13 |
| <i>TUB</i>    | 0.096 | 1  | 0.581 | 7  | 0.55 | 4  | 1.09 | 4  | 3.25  | 4  |
| <i>UBC2</i>   | 0.846 | 12 | 0.785 | 12 | 1.16 | 12 | 1.27 | 12 | 12    | 12 |
| <i>ABCC2</i>  | 0.813 | 11 | 0.682 | 10 | 0.98 | 11 | 1.21 | 10 | 10.49 | 11 |
| <i>COPS3</i>  | 0.459 | 6  | 0.397 | 2  | 0.43 | 1  | 1.11 | 5  | 2.78  | 3  |
| <i>CS</i>     | 0.772 | 10 | 0.584 | 8  | 0.89 | 10 | 1.19 | 9  | 9.21  | 10 |
| <i>R3HDM2</i> | 0.54  | 7  | 0.533 | 4  | 0.47 | 2  | 1.16 | 7  | 4.45  | 6  |

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**Salt\_Root**

|               |       |    |       |    |      |    |      |    |       |    |
|---------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>ACT</i>    | 1.187 | 13 | 2.679 | 13 | 2.35 | 13 | 2.85 | 13 | 13    | 13 |
| <i>CAC</i>    | 0.368 | 4  | 0.396 | 4  | 0.4  | 3  | 1.01 | 1  | 2.83  | 2  |
| <i>CYP</i>    | 0.553 | 8  | 0.182 | 3  | 0.61 | 9  | 1.04 | 3  | 5.05  | 6  |
| <i>DNAJ</i>   | 0.446 | 6  | 0.441 | 5  | 0.25 | 1  | 1.08 | 5  | 3.5   | 3  |
| <i>DREB</i>   | 0.882 | 12 | 1.823 | 12 | 1.3  | 12 | 2.05 | 12 | 12    | 12 |
| <i>EF1</i>    | 0.402 | 5  | 0.644 | 8  | 0.4  | 3  | 1.1  | 7  | 5.38  | 8  |
| <i>RAN</i>    | 0.258 | 3  | 0.631 | 7  | 0.42 | 5  | 1.1  | 8  | 5.38  | 9  |
| <i>TIF1</i>   | 1.436 | 14 | 2.766 | 14 | 2.46 | 14 | 2.93 | 14 | 14    | 14 |
| <i>TUB</i>    | 0.623 | 10 | 0.916 | 11 | 0.79 | 11 | 1.29 | 10 | 10.49 | 11 |
| <i>UBC2</i>   | 0.708 | 11 | 0.621 | 6  | 0.72 | 10 | 1.33 | 11 | 9.23  | 10 |
| <i>ABCC2</i>  | 0.517 | 7  | 0.091 | 1  | 0.34 | 2  | 1.03 | 2  | 2.74  | 1  |
| <i>COPS3</i>  | 0.173 | 1  | 0.692 | 9  | 0.45 | 6  | 1.09 | 6  | 4.24  | 5  |
| <i>CS</i>     | 0.578 | 9  | 0.091 | 1  | 0.49 | 7  | 1.07 | 4  | 3.98  | 4  |
| <i>R3HDM2</i> | 0.173 | 1  | 0.822 | 10 | 0.53 | 8  | 1.16 | 9  | 5.18  | 7  |

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**ABA\_Leaf**

|             |       |    |       |    |      |    |      |    |       |    |
|-------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>ACT</i>  | 0.69  | 14 | 0.995 | 14 | 0.89 | 13 | 1.08 | 14 | 13.74 | 14 |
| <i>CAC</i>  | 0.565 | 12 | 0.718 | 12 | 0.59 | 11 | 0.84 | 12 | 11.74 | 12 |
| <i>CYP</i>  | 0.315 | 5  | 0.317 | 3  | 0.5  | 7  | 0.57 | 3  | 4.79  | 5  |
| <i>DNAJ</i> | 0.385 | 7  | 0.472 | 8  | 0.62 | 12 | 0.64 | 8  | 8.56  | 8  |
| <i>DREB</i> | 0.14  | 1  | 0.33  | 4  | 0.3  | 3  | 0.57 | 3  | 2.63  | 3  |
| <i>EF1</i>  | 0.625 | 13 | 0.801 | 13 | 0.94 | 14 | 0.93 | 13 | 13.24 | 13 |
| <i>RAN</i>  | 0.367 | 6  | 0.408 | 6  | 0.56 | 9  | 0.6  | 6  | 6.64  | 7  |
| <i>TIF1</i> | 0.491 | 10 | 0.53  | 11 | 0.55 | 8  | 0.73 | 10 | 9.92  | 11 |
| <i>TUB</i>  | 0.412 | 8  | 0.508 | 9  | 0.58 | 10 | 0.68 | 9  | 8.97  | 9  |
| <i>UBC2</i> | 0.14  | 1  | 0.343 | 5  | 0.28 | 1  | 0.57 | 3  | 1.97  | 1  |

|                  |       |    |       |    |      |    |      |    |       |    |
|------------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>ABCC2</i>     | 0.145 | 3  | 0.455 | 7  | 0.32 | 4  | 0.63 | 7  | 4.92  | 6  |
| <i>COPS3</i>     | 0.437 | 9  | 0.164 | 1  | 0.35 | 5  | 0.56 | 2  | 3.08  | 4  |
| <i>CS</i>        | 0.171 | 4  | 0.238 | 2  | 0.29 | 2  | 0.53 | 1  | 2     | 2  |
| <i>R3HDM2</i>    | 0.529 | 11 | 0.518 | 10 | 0.43 | 6  | 0.73 | 10 | 9.01  | 10 |
| <b>ABA_Root</b>  |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>       | 0.943 | 14 | 2.551 | 14 | 2.45 | 14 | 2.59 | 14 | 14    | 14 |
| <i>CAC</i>       | 0.377 | 5  | 0.111 | 1  | 0.69 | 4  | 0.67 | 1  | 2.24  | 1  |
| <i>CYP</i>       | 0.614 | 12 | 0.486 | 7  | 0.43 | 1  | 0.87 | 10 | 5.38  | 5  |
| <i>DNAJ</i>      | 0.488 | 8  | 0.312 | 4  | 0.91 | 12 | 0.76 | 4  | 6.26  | 7  |
| <i>DREB</i>      | 0.197 | 1  | 0.687 | 11 | 0.74 | 9  | 0.87 | 11 | 5.74  | 6  |
| <i>EF1</i>       | 0.669 | 13 | 0.71  | 12 | 1.13 | 13 | 1.05 | 13 | 12.74 | 13 |
| <i>RAN</i>       | 0.458 | 7  | 0.584 | 9  | 0.69 | 4  | 0.82 | 8  | 6.7   | 11 |
| <i>TIF1</i>      | 0.567 | 10 | 0.369 | 6  | 0.77 | 10 | 0.82 | 6  | 7.75  | 12 |
| <i>TUB</i>       | 0.425 | 6  | 0.273 | 2  | 0.71 | 7  | 0.7  | 2  | 3.6   | 2  |
| <i>UBC2</i>      | 0.22  | 3  | 0.637 | 10 | 0.73 | 8  | 0.82 | 7  | 6.4   | 9  |
| <i>ABCC2</i>     | 0.197 | 1  | 0.725 | 13 | 0.77 | 10 | 0.89 | 12 | 6.44  | 10 |
| <i>COPS3</i>     | 0.533 | 9  | 0.285 | 3  | 0.7  | 6  | 0.77 | 5  | 5.33  | 4  |
| <i>CS</i>        | 0.266 | 4  | 0.356 | 5  | 0.64 | 3  | 0.71 | 3  | 3.66  | 3  |
| <i>R3HDM2</i>    | 0.595 | 11 | 0.533 | 8  | 0.6  | 2  | 0.86 | 9  | 6.31  | 8  |
| <b>MeJA_Leaf</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>       | 0.861 | 14 | 3.006 | 14 | 2.83 | 14 | 3.02 | 14 | 14    | 14 |
| <i>CAC</i>       | 0.123 | 3  | 0.345 | 7  | 0.53 | 10 | 0.63 | 4  | 5.69  | 6  |
| <i>CYP</i>       | 0.166 | 4  | 0.375 | 9  | 0.53 | 10 | 0.63 | 4  | 6.31  | 8  |
| <i>DNAJ</i>      | 0.1   | 1  | 0.311 | 4  | 0.55 | 12 | 0.62 | 3  | 3.46  | 4  |
| <i>DREB</i>      | 0.428 | 11 | 0.33  | 5  | 0.48 | 7  | 0.78 | 10 | 7.88  | 9  |
| <i>EF1</i>       | 0.501 | 13 | 0.384 | 10 | 0.49 | 8  | 0.83 | 13 | 10.78 | 13 |

|                  |       |    |       |    |      |    |      |    |       |    |
|------------------|-------|----|-------|----|------|----|------|----|-------|----|
| <i>RAN</i>       | 0.1   | 1  | 0.334 | 6  | 0.51 | 9  | 0.61 | 1  | 2.71  | 1  |
| <i>TIF1</i>      | 0.356 | 9  | 0.196 | 2  | 0.39 | 2  | 0.66 | 7  | 4.12  | 5  |
| <i>TUB</i>       | 0.192 | 5  | 0.367 | 8  | 0.46 | 5  | 0.66 | 7  | 6.12  | 7  |
| <i>UBC2</i>      | 0.244 | 6  | 0.248 | 3  | 0.4  | 4  | 0.61 | 1  | 3.46  | 3  |
| <i>ABCC2</i>     | 0.299 | 7  | 0.665 | 13 | 0.59 | 13 | 0.79 | 11 | 10.68 | 12 |
| <i>COPS3</i>     | 0.379 | 10 | 0.168 | 1  | 0.37 | 1  | 0.65 | 6  | 2.78  | 2  |
| <i>CS</i>        | 0.329 | 8  | 0.559 | 12 | 0.47 | 6  | 0.75 | 9  | 8.49  | 11 |
| <i>R3HDM2</i>    | 0.467 | 12 | 0.43  | 11 | 0.39 | 2  | 0.82 | 12 | 8.3   | 10 |
| <b>MeJA_Root</b> |       |    |       |    |      |    |      |    |       |    |
| <i>ACT</i>       | 0.558 | 12 | 0.626 | 10 | 0.52 | 3  | 0.8  | 12 | 8.11  | 9  |
| <i>CAC</i>       | 0.367 | 6  | 0.339 | 7  | 0.73 | 9  | 0.58 | 5  | 6.9   | 7  |
| <i>CYP</i>       | 0.622 | 13 | 0.856 | 13 | 0.7  | 7  | 0.97 | 13 | 11.14 | 12 |
| <i>DNAJ</i>      | 0.387 | 7  | 0.483 | 9  | 0.87 | 12 | 0.66 | 9  | 9.08  | 10 |
| <i>DREB</i>      | 0.257 | 3  | 0.281 | 3  | 0.5  | 1  | 0.57 | 3  | 2.45  | 2  |
| <i>EF1</i>       | 0.511 | 11 | 0.639 | 11 | 0.88 | 13 | 0.77 | 10 | 11.2  | 13 |
| <i>RAN</i>       | 0.339 | 5  | 0.328 | 5  | 0.75 | 10 | 0.57 | 3  | 5.23  | 5  |
| <i>TIF1</i>      | 0.418 | 8  | 0.35  | 8  | 0.71 | 8  | 0.6  | 8  | 8     | 8  |
| <i>TUB</i>       | 0.479 | 10 | 0.643 | 12 | 0.83 | 11 | 0.78 | 11 | 10.98 | 11 |
| <i>UBC2</i>      | 0.233 | 1  | 0.155 | 1  | 0.54 | 4  | 0.51 | 1  | 1.41  | 1  |
| <i>ABCC2</i>     | 0.233 | 1  | 0.318 | 4  | 0.55 | 5  | 0.58 | 5  | 3.16  | 4  |
| <i>COPS3</i>     | 0.439 | 9  | 0.33  | 6  | 0.51 | 2  | 0.59 | 7  | 5.24  | 6  |
| <i>CS</i>        | 0.306 | 4  | 0.198 | 2  | 0.61 | 6  | 0.54 | 2  | 3.13  | 3  |
| <i>R3HDM2</i>    | 0.681 | 14 | 0.941 | 14 | 0.9  | 14 | 1.04 | 14 | 14    | 14 |

**Table S6 Recommended reference genes for RT-qPCR analysis under different conditions in Leguminosae plants.**

| Species  | Treatment             | Candidate  | Recommendation               | Software                                       | Reference           |
|--|-----------------------|--|------------------------------|--|---------------------|
| <i>Glycyrrhiza uralensis</i> F.                            | Osmotic stress-leaf   | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>  | <i>TIF1, DNAJ, RAN</i>       | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | This study          |
| <i>Glycyrrhiza uralensis</i> F.                            | Osmotic stress-root   | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>  | <i>DNAJ, CAC, DREB</i>       | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | This study          |
| <i>Glycyrrhiza inflata</i> B.                              | Osmotic stress-leaf   | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>  | <i>TUB, COPS3, DNAJ</i>      | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | This study          |
| <i>Glycyrrhiza inflata</i> B.                              | Osmotic stress-root   | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>  | <i>TIF1, R3HDM2, ABCC2</i>   | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | This study          |
| <i>Ammopiptanthus mongolicus</i> (Maxim. ex Kom.) Cheng f. | Drought stress        | <i>eIF1, eIF3, Tub1, Abc1, EF1, Tub2, UBQ, Ubc1, Ubc2, Ubc4, eIF2, Ubc5, eIF4, EF2</i> | <i>eIF1, eIF3, UBQ</i>       | geNorm, NormFinder                             | (Shi et al. 2012)   |
| <i>Arachis hypogaea</i> L.                                 | Drought stress        | <i>CYP2, ELF1B, LEC, ADH3, ACT11, ATPsyn, G6PD, UBC1</i>                               | <i>CYP2, ELF1B, G6PD</i>     | geNorm, NormFinder                             | (Reddy et al. 2013) |
| <i>Arachis hypogaea</i> L.                                 | Osmotic stress        | <i>YLS8, GAPDH, UKN2, ACTIN11, ACTIN7, ACTIN1, ADH3, ELF1B, G6PD, 60S, UB11</i>        | <i>ELF1B, YLS8, UB11</i>     | geNorm, NormFinder, BestKeeper                 | (He et al. 2017)    |
| <i>Cajanus cajan</i> (Linn.) Millsp.                       | Drought stress        | <i>IF4α, TUB6, HSP90, 18S rRNA, EF1α, UBQ10, GAPDH, 25S rRNA, ACT1, UBC</i>            | <i>IF4α, TUB6, HSP90</i>     | geNorm, NormFinder, BestKeeper                 | (Sinha et al. 2015) |
| <i>Caragana intermedia</i>                                 | Osmotic stress leaves | <i>ACT7, TUA5, EF-1α, PP2A, SAND, TIP41, F-box, PEPKR1, UNK1, UNK2</i>                 | <i>TIP41, PP2A, SAND</i>     | geNorm, NormFinder, BestKeeper                 | (Zhu et al. 2013)   |
| <i>Caragana intermedia</i>                                 | Osmotic stress roots  | <i>ACT7, TUA5, EF-1α, PP2A, SAND, TIP41, F-box, PEPKR1, UNK1, UNK2</i>                 | <i>UNK1, UNK2, PP2A</i>      | geNorm, NormFinder, BestKeeper                 | (Zhu et al. 2013)   |
| <i>Caragana korshinskii</i> Kom                            | Drought stress        | <i>GAPDH, EF-1α, SKIP5-1, TUA, TUB, SKIP1, UBQ, CAP, TUB3, SKIP5-2</i>                 | <i>GAPDH, EF-1α, SKIP5-1</i> | geNorm, NormFinder, BestKeeper                 | (Yang et al. 2014)  |

|                                       |                      |  |                               |  |                               |
|---------------------------------------|----------------------|--|-------------------------------|--|-------------------------------|
| <i>Cassia obtusifolia</i> L.          | Osmotic stress       | <i>ACT2, UBQ1,β-TUB2, CYP1, EF1α2, UBQ2, ACT1, CYP2, α-TUB1, α-TUB2</i>  | <i>ACT2, UBQ1, CYP1</i>       | geNorm, NormFinder, BestKeeper                 | (Liu et al. 2015)             |
| <i>Cicer arietinum</i> L.             | Drought stress       | <i>bHLH, CAC, UBQ, PUBQ, 18S rRNA, GAPDH, EF-1a, Helicase, TUB, ACT, PP2A, PPR</i>   | <i>bHLH, CAC, UBQ</i>         | geNorm   | (Castro et al. 2012)          |
| <i>Cyamopsis tetragonoloba</i> L.Taub | Drought stress       | <i>ACT 7, TUB, 18S rRNA, CYP, ACT 11, EF-1α, TUA, UBQ 10, UBC 2, GAPDH</i>   | <i>ACT7, TUB, ACT11</i>       | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | (Jaiswal et al. 2019)         |
| <i>Glycine max</i> (L.) Merr.         | Drought stress       | <i>NUDIX, NCL1,DNAJ,FYVE, CYP, TUB4, SKIP16, PEPKR1, TIP41, ELF1-B, TUA, B-actin, GAPDH, CYST, Golgin-84, NCL1, RNA-poly Mitovirus</i> | <i>NUDIX, NCL1, Golgin-84</i> | geNorm, NormFinder                             | (Marcolino-Gomes et al. 2015) |
| <i>Glycine max</i> (L.) Merr.         | Drought stress       | <i>TUB4, TUA5, EF1A, CYP, EF1B, TUA4, ACT2/7, ACT11, UKN2</i>  | <i>TUB4, TUA5, EF1A</i>       | geNorm, NormFinder                             | (Ma et al. 2013)              |
| <i>Glycine max</i> (L.) Merr.         | Osmotic stress       | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1a, ELF1b, Fbox, IDE, SUBI2, TUBα, TUBβ</i>  | <i>Fbox, 60S, ELF1b</i>       | geNorm   | (Le et al. 2012)              |
| <i>Glycine max</i> (L.) Merr.         | Osmotic stress root  | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1a, ELF1b, Fbox, IDE, SUBI2, TUBα, TUBβ</i>  | <i>Fbox, ABC, Act11</i>       | geNorm   | (Le et al. 2012)              |
| <i>Glycine max</i> (L.) Merr.         | Osmotic stress shoot | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1a, ELF1b, Fbox, IDE, SUBI2, TUBα, TUBβ</i>  | <i>Fbox, 60S, Act11</i>       | geNorm   | (Le et al. 2012)              |
| <i>Glycyrrhiza glabra</i> L.          | Drought stress leaf  | <i>UBC2, TUB, ACT, FBP, EF1, TIF1, GAPDH, HIS3</i>   | <i>UBC2, TUB, ACT</i>         | geNorm, NormFinder                             | (Maroufi 2016)                |
| <i>Glycyrrhiza glabra</i> L.          | Drought stress root  | <i>UBC2, TUB, ACT, FBP, EF1, TIF1, GAPDH, HIS4</i>   | <i>UBC2, TUB, ACT</i>         | geNorm, NormFinder                             | (Maroufi 2016)                |
| <i>Oxytropis ochrocephala</i> Bunge   | Drought stress       | <i>HIS, ACT101,TUA,ACT7, FBA, TUB, ACTB, GAPDH2, MET, ACT11, GAPDH1, 18S</i>   | <i>HIS, ACT101, TUB</i>       | geNorm, NormFinder, BestKeeper                 | (Zhuang et al. 2015)          |
| <i>Robinia pseudoacacia</i> L.        | Osmotic stress       | <i>helicase, EF1α,18s rRNA, ACT, GAPDH, βTUB, UBQ, PP2A, CAC, SAMDC, CYP, SAND</i>   | <i>ACT, GAPDH, helicase</i>   | geNorm, NormFinder, BestKeeper                 | (Wang et al. 2018)            |

|  |                       |   |                           |  |                        |
|--|-----------------------|---|---------------------------|--|------------------------|
| <i>Trifolium repens</i> L.                     | Drought stress        | <i>EF1a, ACT11, UBQ, CYP, EF1b, G6PD, TUA, UBQ10</i>  | <i>EF1a, ACT11, UBQ</i>   | ΔCt, NormFinder, single-factor ANOVA           | (Narancio et al. 2018) |
| <i>Vigna angularis</i> (Willd.) Ohwi et Ohashi | Drought stress        | <i>Fbox, PTB, GAPDH, ACT, ZMPP, EF, PP2A, UBC, UBN</i>  | <i>Fbox, PTB, EF</i>      | geNorm, NormFinder, BestKeeper                 | (Chi et al. 2016)      |
| <i>Vigna mungo</i> L.                          | Drought stress        | <i>TUB, 18S, CYP, ACT, EF1A, 18S, H2A, GAPDH, CYP, TUB</i>  | <i>TUB, 18S, ACT</i>      | geNorm, NormFinder                             | (Kundu et al. 2013)    |
| <i>Vigna unguiculata</i> L. Walp               | Drought stress        | <i>VuYls8, VuPolyP, VuUbq10, VuPp2A, VuUbq28, VuEF1-Alpha, VuAct2, VuGapdh, VusHsp17.7, VuNced1</i> | <i>PolyP, Pp2A, Ubq28</i> | geNorm, NormFinder                             | (Da Silva et al. 2015) |
| <i>Vigna unguiculata</i> L. Walp               | Drought stress leaf   | <i>VuUbq10, VuEF1-Alpha, VuGapdh, VusHsp17.7, VuNced1</i>   | <i>PolyP, Pp2A, Ubq28</i> | geNorm, NormFinder                             | (Da Silva et al. 2015) |
| <i>Vigna unguiculata</i> L. Walp               | Drought stress nodule | <i>VuPp2A, VuYls8, VuUbq28, VuUbq10, VuEF1-Alpha, VuPolyP, VuAct2, VuGapdh, VusHsp17.7, VuNced1</i> | <i>PolyP, Pp2A, Ubq28</i> | geNorm, NormFinder                             | (Da Silva et al. 2015) |
| <i>Glycyrrhiza uralensis</i> F.                | Salt stress-leaf      | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>               | <i>DNAJ, CYP, CAC</i>     | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | This study             |
| <i>Glycyrrhiza uralensis</i> F.                | Salt stress-root      | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>               | <i>DREB, DNAJ, UBC2</i>   | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | This study             |
| <i>Glycyrrhiza inflata</i> B.                  | Salt stress-leaf      | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>               | <i>CAC, RAN, COPS3</i>    | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | This study             |
| <i>Glycyrrhiza inflata</i> B.                  | Salt stress-root      | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>               | <i>ABCC2, CAC, DNAJ</i>   | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | This study             |

|  |             |   |  |                                |                      |
|--|-------------|---|--|--------------------------------|----------------------|
| <i>Ammopiptanthus mongolicus</i> (Maxim. ex Kom.) Cheng f. | Salt stress | <i>eIF1, eIF3, Tub1, Abc1, EF1, Tub2, UBQ, Ubc1, Ubc2, Ubc4, eIF2, Ubc5, eIF4, EF2</i>  | <i>eIF1, eIF3, Ubc2</i>                        | geNorm, NormFinder             | (Shi et al. 2012)    |
| <i>Arachis hypogaea</i> L.                                 | Salt stress | <i>CYP2, ELF2B, LEC, ADH3, ACT11, ATPsyn, G6PD, UBC1</i>  | <i>CYP2, ELF1B, G6PD</i>                       | geNorm, NormFinder             | (Reddy et al. 2013)  |
| <i>Arachis hypogaea</i> L.                                 | Salt stress | <i>YLS8, GAPDH, UKN2, ACTIN11, ACTIN7, ACTIN1, ADH3, ELF1B, G6PD, 60S, UBII</i>   | <i>YLS8, GAPDH, ADH3</i>                       | geNorm, NormFinder, BestKeeper | (He et al. 2017)     |
| <i>Arachis hypogaea</i> L.                                 | Salt stress | <i>TUA5, UKN2, TUB4, PEPKR1, UKN1, ACT2/7, ACT11, EF1b, CYP, UBQ10, TIP41, HDC, SKIP16, MTP</i>   | <i>TUA5, UKN2, UKN1</i>                        | geNorm, NormFinder             | (Chi et al. 2012)    |
| <i>Arachis hypogaea</i> L.                                 | leaves      | <i>TUA5, UKN2, TUB4, PEPKR1, UKN1, ACT2/7, ACT11, EF1b, CYP, UBQ10, TIP41, HDC, SKIP16, MTP</i>   | <i>HDC, UKN1, SKIP16</i>                       | geNorm, NormFinder             | (Chi et al. 2012)    |
| <i>Arachis hypogaea</i> L.                                 | roots       | <i>GAPDH, UBC, HSP90, UBQ10, EF1<math>\alpha</math>, 18SrRNA, 25SrRNA, TUB6, ACT1, IF4<math>\alpha</math></i>                                   | <i>GAPDH, UBC, HSP90</i>                       | geNorm, NormFinder             | (Sinha et al. 2015)  |
| <i>Cajanus cajan</i> (Linn.) Millsp.                       | Salt stress | <i>ACT7, TUA5, EF-1<math>\alpha</math>, PP2A, SAND, TIP41, F-box, PEPKR1, UNK1, UNK2</i>  | <i>UNK2, SAND, EF-1<math>\alpha</math></i>     | geNorm, NormFinder, BestKeeper | (Zhu et al. 2013)    |
| <i>Caragana intermedia</i>                                 | leaves      | <i>ACT7, TUA5, EF-1<math>\alpha</math>, PP2A, SAND, TIP41, F-box, PEPKR1, UNK1, UNK2</i>  | <i>UNK2, SAND, TIP41</i>                       | geNorm, NormFinder, BestKeeper | (Zhu et al. 2013)    |
| <i>Caragana intermedia</i>                                 | roots       | <i>GAPDH, EF-1<math>\alpha</math>, SKIP5-1, TUA, TUB, SKIP1, UBQ, CAP, TUB3, SKIP5-2</i>  | <i>GAPDH, EF-1<math>\alpha</math>, SKIP5-1</i> | geNorm, NormFinder, BestKeeper | (Yang et al. 2014)   |
| <i>Caragana korshinskii</i> Kom                            | Salt stress | <i>ACT2, UBQ1, <math>\beta</math>-TUB2, CYP1, EF1<math>\alpha</math>2, UBQ2, ACT1, CYP2, <math>\alpha</math>-TUB1, <math>\alpha</math>-TUB2</i> | <i>EF1<math>\alpha</math>2, UBQ1, CYP1</i>     | geNorm, NormFinder, BestKeeper | (Liu et al. 2015)    |
| <i>Cassia obtusifolia</i> L.                               | Salt stress | <i>bHLH, CAC, UBQ, PUBQ, 18S rRNA, GAPDH, EF-1<math>\alpha</math>, Helicase, TUB, ACT, PP2A, PPR</i>  | <i>TUB, PP2A, EF1<math>\alpha</math></i>       | geNorm                         | (Castro et al. 2012) |
| <i>Cicer arietinum</i> L.                                  | Salt stress |   |  |                                |                      |



|  |             |   |                                |  |                       |
|--|-------------|---|--------------------------------|--|-----------------------|
| <i>Cyamopsis tetragonoloba</i> L.Taub          | Salt stress | <i>ACT 7, TUB, 18S rRNA, CYP, ACT 11, EF-1α, TUA, UBQ 10, UBC 2, GAPDH</i>  | <i>GAPDH, EF-1α, ACT 7</i>     | geNorm, NormFinder, BestKeeper, ΔCt, RefFinder | (Jaiswal et al. 2019) |
| <i>Glycine max</i> (L.) Merr.                  | Salt stress | <i>EF1A, ACT11, Act2/7, TUA5, CYP, EF1B, TUA4, TUB4, UKN2</i>   | <i>EF1A, ACT11, EF1B</i>       | geNorm, NormFinder                             | (Ma et al. 2013)      |
| <i>Glycine max</i> (L.) Merr.                  | Salt stress | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1a, ELF1b, Fbox, IDE, SUBI2, TUBα, TUBβ</i>   | <i>60s, Fbox, ABC</i>          | geNorm   | (Le et al. 2012)      |
| <i>Glycine max</i> (L.) Merr.                  | Salt stress | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1a, ELF1b, Fbox, IDE, SUBI2, TUBα, TUBβ</i>   | <i>ELF1b, IDE, ABC</i>         | geNorm   | (Le et al. 2012)      |
| <i>Glycine max</i> (L.) Merr.                  | Salt stress | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1a, ELF1b, Fbox, IDE, SUBI2, TUBα, TUBβ</i>   | <i>Fbox, ELF1b, 60s</i>        | geNorm   | (Le et al. 2012)      |
| <i>Medicago sativa</i> L.                      | Salt stress | <i>Msc27, ACT2, 18S rRNA, GAPDH, TUB, β - Actin, ELF-1α, UBC2</i>   | <i>ELF-1α, Msc27, 18S rRNA</i> | geNorm, BestKeeper                             | (Wang et al. 2015)    |
| <i>Oxytropis ochrocephala</i> Bunge            | Salt stress | <i>HIS, ACT101, TUA, ACT7, FBA, TUB, ACTB, GAPDH2, MET, ACT11, GAPDH1, 18S PP2A, GH720808, TUB, GH720838, 18S rRNA, GH720843, Helicase, GAPDH, α-Tubulin,</i> | <i>GAPDH2, HIS, ACT101</i>     | geNorm, NormFinder, BestKeeper                 | (Zhuang et al. 2015)  |
| <i>Pisum sativum</i> L.                        | Salt stress | <i>Actin, EF-1α</i>   | <i>PP2A, TUB, GH720838</i>     | geNorm, qBase                                  | (Die et al. 2010)     |
| <i>Robinia pseudoacacia</i> L.                 | Salt stress | <i>helicase, EF1α, 18s rRNA, ACT, GAPDH, βTUB, UBQ, PP2A, CAC, SAMDC, CYP, SAND</i>   | <i>helicase, ACT, GAPDH</i>    | geNorm, NormFinder, BestKeeper                 | (Wang et al. 2018)    |
| <i>Vigna angularis</i> (Willd.) Ohwi et Ohashi | Salt stress | <i>Fbox, UBC, EF, ACT, ZMPP, GAPDH, PP2A, UBN, PTB</i>  | <i>Fbox, UBC, PP2A</i>         | geNorm, NormFinder, BestKeeper                 | (Chi et al. 2016)     |
| <i>Vigna mungo</i> L.                          | Salt stress | <i>H2A, EF1A, 18S, ACT, EF1A, 18S, H2A, GAPDH, CYP, TUB</i>   | <i>H2A, EF1A, ACT</i>          | geNorm, NormFinder                             | (Kundu et al. 2013)   |

|                                     |                    |   |   |  |                              |
|-------------------------------------|--------------------|---|---|--|------------------------------|
| <i>Vigna unguiculata</i> L.<br>Walp | Salt stress        | <i>UBC2, FBOX, UNK, EF1-<math>\alpha</math>, <math>\beta</math>-TUB, Fbox, UE21D</i>  | <i>UBC2, FBOX, UNK</i>  | geNorm, NormFinder, BestKeeper, $\Delta$ Ct            | (Barbosa Amorim et al. 2018) |
| <i>Glycyrrhiza uralensis</i> F.     | ABA treatment-leaf | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>   | <i>CS, CAC, UBC2</i>  | geNorm, NormFinder, BestKeeper, $\Delta$ Ct, RefFinder | This study                   |
| <i>Glycyrrhiza uralensis</i> F.     | ABA treatment-root | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>   | <i>CAC, RAN, UBC2</i>   | geNorm, NormFinder, BestKeeper, $\Delta$ Ct, RefFinder | This study                   |
| <i>Glycyrrhiza inflata</i> B.       | ABA treatment-leaf | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>   | <i>UBC2, CS, DREB</i>   | geNorm, NormFinder, BestKeeper, $\Delta$ Ct, RefFinder | This study                   |
| <i>Glycyrrhiza inflata</i> B.       | ABA treatment-root | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>   | <i>CAC, TUB, CS</i>   | geNorm, NormFinder, BestKeeper, $\Delta$ Ct, RefFinder | This study                   |
| <i>Caragana korshinskii</i> Kom     | ABA treatment      | <i>GAPDH, EF-1<math>\alpha</math>, SKIP5-1, TUA, TUB, SKIP1, UBQ, CAP, TUB3, SKIP5-2</i>  | <i>GAPDH, EF-1<math>\alpha</math>, SKIP5-1</i>                | geNorm, NormFinder, BestKeeper                         | (Yang et al. 2014)           |
| <i>Cassia obtusifolia</i> L.        | ABA treatment      | <i>ACT2, UBQ1, <math>\beta</math>-TUB2, CYP1, EF1<math>\alpha</math>2, UBQ2, ACT1, CYP2, <math>\alpha</math>-TUB1, <math>\alpha</math>-TUB2</i> | <i>EF1<math>\alpha</math>2, <math>\beta</math>-TUB2, CYP1</i> | geNorm, NormFinder, BestKeeper                         | (Liu et al. 2015)            |
| <i>Glycine max</i> (L.) Merr.       | ABA treatment      | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1<math>\alpha</math>, ELF1b, Fbox, IDE, SUBI2, TUB<math>\alpha</math>, TUB<math>\beta</math></i>      | <i>60s, ELF1b, ABC</i>  | geNorm   | (Le et al. 2012)             |
| <i>Glycine max</i> (L.) Merr.       | ABA treatment-root | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1<math>\alpha</math>, ELF1b, Fbox, IDE, SUBI2, TUB<math>\alpha</math>, TUB<math>\beta</math></i>      | <i>60s, ELF1b, ABC</i>  | geNorm   | (Le et al. 2012)             |

|                                  |                     |  |                                   |  |                     |
|----------------------------------|---------------------|--|-----------------------------------|--|---------------------|
| <i>Glycine max</i> (L.)<br>Merr. | ABA                 |  |                                   |  |                     |
|                                  | treatment shoot     | <i>60S, ABC, Act27, Act11, CDPK, CYP2, ELF1a, ELF1b, Fbox, IDE, SUBI2, TUB<math>\alpha</math>, TUB<math>\beta</math></i> | <i>ELF1b, Fbox, ABC</i>           | geNorm   | (Le et al. 2012)    |
| <i>Medicago sativa</i> L.        | ABA                 | <i>Msc27, ACT2, 18S rRNA, GAPDH, TUB, <math>\beta</math> -</i>   | <i>Msc27, Actin2,</i>             |  | (Wang et al. 2015)  |
|                                  | treatment           | <i>Actin, ELF-1<math>\alpha</math>, UBC2</i>   | <i>18S rRNA</i>                   | geNorm, BestKeeper                                     |                     |
| <i>Robinia pseudoacacia</i> L.   | ABA                 | <i>ACT, GAPDH, CAC, <math>\beta</math>TUB, UBQ, EF1a, helicase,</i>  | <i>ACT, GAPDH,</i>                | geNorm, NormFinder,                                    | (Wang et al. 2018)  |
|                                  | treatment           | <i>PP2A, 18s rRNA, SAMDC, CYP</i>  | <i>helicase</i>                   | BestKeeper   |                     |
| <i>Glycyrrhiza uralensis</i> F.  | MeJA treatment-leaf | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>                                    | <i>ABCC2, UBC2, CAC</i>           | geNorm, NormFinder, BestKeeper, $\Delta$ Ct, RefFinder | This study          |
| <i>Glycyrrhiza uralensis</i> F.  | MeJA treatment-root | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>                                    | <i>CAC, TUB, ABCC2</i>            | geNorm, NormFinder, BestKeeper, $\Delta$ Ct, RefFinder | This study          |
| <i>Glycyrrhiza inflata</i> B.    | MeJA treatment-leaf | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>                                    | <i>RAN, COPS3, UBC2</i>           | geNorm, NormFinder, BestKeeper, $\Delta$ Ct, RefFinder | This study          |
| <i>Glycyrrhiza inflata</i> B.    | MeJA treatment-root | <i>ACT, CAC, CYP, DNAJ, DREB, EF1, RAN, TIF1, TUB, UBC2, ABCC2, COPS3, CS, R3HDM2</i>                                    | <i>UBC2, DREB, CS</i>             | geNorm, NormFinder, BestKeeper, $\Delta$ Ct, RefFinder | This study          |
| <i>Glycine max</i> (L.)<br>Merr. | MeJA treatment      | <i>EF1A 1a1, EF1A 2b, ACT11, EF1A 2a, EF1B, UKNI, ACT, SKIP16</i>  | <i>EF1A 2a, EF1A 1a1, EF1A 2b</i> | geNorm, NormFinder, BestKeeper, RefFinder              | (Costa et al. 2016) |