

**Table S3: qPCR analysis of expression in LSo, SSo, and SSI leaves in response to simulated herbivory at 2 h, 6 h, and 24 h post-treatment\*.**

| Clone ID [Genome model]<br>(annotation)                                       | Local Treated Source (LSO) |         |        |         |         |         | Systemic Source (SSo) |         |       |         |        |         | Systemic Sink (SSI) |         |      |         |         |         |
|---|----------------------------|---------|--------|---------|---------|---------|-----------------------|---------|-------|---------|--------|---------|---------------------|---------|------|---------|---------|---------|
|   | 2hrs                       |         | 6hrs   |         | 24hrs   |         | 2hrs                  |         | 6hrs  |         | 24hrs  |         | 2hrs                |         | 6hrs |         | 24hrs   |         |
|   | FC                         | P       | FC     | P       | FC      | P       | FC                    | P       | FC    | FC      | P      | FC      | FC                  | P       | FC   | P       | FC      | P       |
| WS0158_D14 [POPTR_0009s15160]<br>(histone deacetylase)                        | 4.77                       | < 0.001 | 4.48   | 0.001   | 5.18    | < 0.001 | 3.48                  | 0.004   | 1.38  | 0.437   | 1.73   | 0.187   | 0.15                | < 0.001 | 0.67 | 0.330   | 1.23    | 0.611   |
|   | 0.812                      | 0.060   | 0.871  | 0.211   | 1.09    | 0.425   | 0.994                 | 0.990   | 1.24  | 0.652   | 1.06   | 0.900   | 1.26                | 0.621   | 1.81 | 0.210   | 3.39    | 0.011   |
| WS0147_P16 [POPTR_0019s12320]<br>(9- <i>cis</i> -epoxycarotenoid dioxygenase) | 0.37                       | 0.007   | 0.55   | 0.091   | 1.63    | 0.162   | 3.06                  | 0.002   | 0.85  | 0.636   | 1.12   | 0.739   | 202.71              | < 0.001 | 1.67 | 0.145   | 4.56    | < 0.001 |
|   | 0.47                       | < 0.001 | 0.46   | < 0.001 | 0.81    | 0.008   | 1.13                  | 0.706   | 1.28  | 0.455   | 0.95   | 0.874   | 7.76                | < 0.001 | 1.87 | 0.059   | 1.52    | 0.201   |
| WS0124_D16 [POPTR_0014s11710]<br>(universal stress protein)                   | 1.12                       | 0.766   | 1.44   | 0.332   | 2.33    | 0.027   | 3.62                  | 0.001   | 1.51  | 0.271   | 0.87   | 0.708   | 504.90              | < 0.001 | 1.29 | 0.488   | 0.87    | 0.709   |
|   | 0.60                       | < 0.001 | 0.68   | < 0.001 | 0.73    | 0.002   | 1.07                  | 0.805   | 0.86  | 0.545   | 0.68   | 0.125   | 20.94               | < 0.001 | 1.39 | 0.194   | 0.97    | 0.890   |
| WS0205_I02 [POPTR_0002s14800]<br>(LRR transmembrane protein kinase)           | 0.73                       | 0.485   | 0.60   | 0.255   | 0.28    | 0.007   | 1301.08               | < 0.001 | 87.40 | < 0.001 | 4.42   | 0.002   | 0.07                | < 0.001 | 0.07 | < 0.001 | 0.02    | < 0.001 |
|   | 0.74                       | 0.112   | 1.93   | 0.001   | 18.32   | < 0.001 | 0.89                  | 0.705   | 0.59  | 0.075   | 21.812 | < 0.001 | 0.79                | 0.427   | 1.06 | 0.856   | 2.61    | 0.002   |
| WS0212_I21 [POPTR_0006s24090]<br>(aminopeptidase M)                           | 2.32                       | 0.046   | 1.10   | 0.822   | 2.04    | 0.087   | 14.51                 | < 0.001 | 1.31  | 0.511   | 0.79   | 0.562   | 2.26                | 0.053   | 0.99 | 0.970   | 1.85    | 0.138   |
|   | 1.95                       | < 0.001 | 3.28   | < 0.001 | 12.06   | < 0.001 | 1.16                  | 0.446   | 0.72  | 0.094   | 12.11  | < 0.001 | 1.88                | 0.001   | 1.72 | 0.006   | 9.53    | < 0.001 |
| WS0214_H20 [POPTR_0001s22060]<br>(serine carboxypeptidase S28)                | 2.48                       | 0.071   | 27.31  | < 0.001 | 11.77   | < 0.001 | 19.90                 | < 0.001 | 11.95 | < 0.001 | 21.55  | < 0.001 | 3.17                | 0.024   | 0.76 | 0.579   | 64.45   | < 0.001 |
|   | 2.42                       | < 0.001 | 4.88   | < 0.001 | 1.42    | 0.006   | 1.22                  | 0.429   | 1.39  | 0.200   | 1.44   | 0.151   | 1.62                | 0.059   | 1.21 | 0.455   | 6.51    | < 0.001 |
| WS0143_A03 [POPTR_0009s14420]<br>(endochitinase)                              | 2.48                       | 0.046   | 8.86   | < 0.001 | 320.77  | < 0.001 | 16.53                 | < 0.001 | 0.85  | 0.722   | 7.15   | < 0.001 | 0.87                | 0.751   | 2.61 | 0.035   | 123.67  | < 0.001 |
|   | 2.36                       | < 0.001 | 8.42   | < 0.001 | 10.89   | < 0.001 | 1.05                  | 0.800   | 1.94  | 0.002   | 15.09  | < 0.001 | 1.15                | 0.502   | 1.82 | 0.004   | 5.57    | < 0.001 |
| WS0134_G14 [POPTR_0010s01150]<br>(Kunitz protease inhibitor)                  | 3.04                       | < 0.001 | 25.05  | < 0.001 | 1857.27 | < 0.001 | 1.85                  | 0.026   | 0.21  | < 0.001 | 79.67  | < 0.001 | 2.89                | < 0.001 | 1.83 | 0.029   | 296.05  | < 0.001 |
|   | 1.92                       | < 0.001 | 3.53   | < 0.001 | 14.11   | < 0.001 | 1.01                  | 0.959   | 0.69  | 0.082   | 9.63   | < 0.001 | 1.78                | 0.007   | 1.32 | 0.181   | 10.21   | < 0.001 |
| PPO [POPTR_0001s39660]<br>(polyphenol oxidase)                                | 2.97                       | 0.009   | 283.78 | < 0.001 | 607.31  | < 0.001 | 1.28                  | 0.534   | 2.59  | 0.021   | 794.12 | < 0.001 | 1.42                | 0.381   | 5.53 | < 0.001 | 2234.94 | < 0.001 |
|   | 1.37                       | 0.087   | 6.54   | < 0.001 | 4.32    | < 0.001 | 0.92                  | 0.754   | 1.18  | 0.528   | 2.00   | 0.008   | 1.37                | 0.222   | 1.39 | 0.202   | 8.43    | < 0.001 |
| TPS1 [POPTR_0001s44080]<br>(-)-germacrene- <i>D</i> synthase)                 | 2.55                       | 0.010   | 41.66  | < 0.001 | 9.37    | < 0.001 | 2.17                  | 0.032   | 13.61 | < 0.001 | 16.62  | < 0.001 | 10.30               | < 0.001 | 2.00 | 0.052   | 50.73   | < 0.001 |
|   | 1.69                       | 0.031   | 4.50   | < 0.001 | 1.89    | 0.009   | 1.05                  | 0.902   | 2.86  | 0.006   | 2.44   | 0.020   | 2.93                | 0.005   | 1.05 | 0.896   | 6.25    | < 0.001 |

\* Values represent fold-change (FC) relative to control trees. Values obtained by qPCR represent the mean of three or more independent technical replicates, each consisting of pooled RNA from five biological replicates. A Student's *t*-test (two-sample, unpaired, one-sided) was performed to test significance (*P*) of up- or down-regulation of each transcript between treated and control plants. For each transcript, qPCR data is shaded light-grey, with the corresponding microarray data provided below (see Table S1 for the complete microarray dataset). Abbreviations: LRR, leucine-rich repeat.