**Supplementary Material**

**Table S1.** Two-way ANOVA summary regarding the inspection of significant effects of Hg concentration, site of origin of tested plants, and their interactions, regarding iHg concentrations in roots, stems or leaves measured following 2 or 4 h of exposure in experiments held during the day or night.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WINTER** |  | | | | |  | | | | |  | | | | |  | | | |  |
|  | **DAY . t = 2 h** | | | | | **DAY . t = 4 h** | | | | | **NIGHT . t = 2 h** | | | | | **NIGHT . t = 4 h** | | | |  |
| Source of variation | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  |
| ROOTS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [iHg] | 1 | 0.0761 | 39.323 | <0.001 |  | 1 | 0.0035 | 1.158 | 0.313 |  | 1 | 0.0057 | 0.786 | 0.401 | \* | 1 | 0.0024 | 2.607 | 0.150 |  |
| Site | 1 | 0.0386 | 19.941 | 0.002 | 1 | 0.0130 | 4.287 | 0.072 | 1 | 0.0084 | 1.166 | 0.312 | 1 | 1.45e-4 | 0.158 | 0.730 |  |
| [iHg]\*Site | 1 | 0.0452 | 23.390 | 0.001 | 1 | 0.0015 | 0.507 | 0.497 | 1 | 0.0062 | 0.864 | 0.380 | 1 | 0.0031 | 3.412 | 0.107 |  |
| Error | 8 | 0.0155 |  |  | 8 | 0.0030 |  |  | 8 | 0.0072 |  |  | 7 | 9.13e-4 |  |  |  |
| STEMS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [iHg] | 1 | 0.0068 | 15.92 | 0.004 |  | 1 | 0.0023 | 2.672 | 0.141 |  | 1 | 0.0013 | 2.092 | 0.186 |  | 1 | 9.99e-5 | 0.113 | 0.745 |  |
| Site | 1 | 0.0027 | 6.210 | 0.037 |  | 1 | 0.0073 | 8.455 | 0.020 |  | 1 | 0.0114 | 19.016 | 0.002 |  | 1 | 0.0135 | 15.32 | 0.004 |  |
| [iHg]\*Site | 1 | 8.07e-5 | 0.188 | 0.676 |  | 1 | 1.80e-6 | 0.002 | 0.965 |  | 1 | 2.17e-4 | 0.362 | 0.564 |  | 1 | 0.0020 | 2.289 | 0.169 |  |
| Error | 8 | 4.30e-4 |  |  |  | 8 | 8.63e-4 |  |  |  | 8 | 6.00e-4 |  |  |  | 8 | 8.83e-4 |  |  |  |
| LEAVES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [iHg] | 1 | 9.66e-5 | 0.028 | 0.871 |  | 1 | 0.0108 | 0.999 | 0.347 |  | 1 | 0.0089 | 1.492 | 0.257 | × | 1 | 8.43e-5 | 0.008 | 0.931 |  |
| Site | 1 | 0.0074 | 2.152 | 0.181 |  | 1 | 0.0023 | 0.218 | 0.653 |  | 1 | 0.0046 | 0.770 | 0.406 | 1 | 0.0072 | 0.685 | 0.432 |  |
| [iHg]\*Site | 1 | 0.0068 | 1.980 | 0.197 |  | 1 | 0.0080 | 0.741 | 0.414 |  | 1 | 0.0098 | 1.644 | 0.236 | 1 | 0.0043 | 0.411 | 0.539 |  |
| Error | 8 | 0.0035 |  |  |  | 8 | 0.0108 |  |  |  | 8 | 0.0060 |  |  | 8 | 0.0105 |  |  |  |
| **SUMMER** | | | | | |  | | | | |  | | | | |  | | | |  |
|  | **DAY . t = 2 h** | | | | | **DAY . t = 4 h** | | | | | **NIGHT . t = 2 h** | | | | | **NIGHT . t = 4 h** | | | |  |
| Source of variation | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  |
| ROOTS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [iHg] | 1 | 0.0012 | 1.279 | 0.291 |  | 1 | 1.95e-5 | 0.078 | 0.787 |  | 1 | 0.0018 | 1.949 | 0.200 |  | 1 | 0.0034 | 7.327 | 0.030 | × |
| Site | 1 | 0.0097 | 10.27 | 0.013 |  | 1 | 0.0038 | 15.23 | 0.005 | 1 | 0.0235 | 26.13 | <0.001 |  | 1 | 0.0064 | 13.59 | 0.008 |
| [iHg]\*Site | 1 | 8.67e-6 | 0.009 | 0.926 |  | 1 | 5.94e-5 | 0.237 | 0.640 | 1 | 4.69e-4 | 0.521 | 0.491 |  | 1 | 0.0012 | 2.565 | 0.153 |
| Error | 8 | 9.42e-4 |  |  |  | 8 | 2.51e-4 |  |  | 8 | 8.99e-4 |  |  |  | 7 | 4.69e-4 |  |  |
| STEMS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [iHg] | 1 | 2.59e-4 | 4.278 | 0.072 |  | 1 | 8.16e-5 | 0.829 | 0.389 |  | 1 | 2.08e-6 | 0.010 | 0.923 |  | 1 | 1.33e-6 | 0.0185 | 0.895 |  |
| Site | 1 | 2.05e-5 | 0.340 | 0.576 |  | 1 | 4.41e-7 | 0.0045 | 0.948 |  | 1 | 8.33e-8 | 0.0004 | 0.985 |  | 1 | 0.00154 | 21.358 | 0.002 |
| [iHg]\*Site | 1 | 9.67e-4 | 15.994 | 0.004 |  | 1 | 1.82e-4 | 1.846 | 0.211 |  | 1 | 6.75e-6 | 0.0325 | 0.861 |  | 1 | 1.47e-4 | 2.037 | 0.191 |
| Error | 8 | 6.04e-5 |  |  |  | 8 | 9.85e-5 |  |  |  | 8 | 2.08e-4 |  |  |  | 8 | 7.22e-5 |  |  |
| LEAVES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [iHg] | 1 | 0.0212 | 2.459 | 0.156 |  | 1 | 0.0148 | 5.322 | 0.050 |  | 1 | 0.0135 | 2.700 | 0.139 |  | 1 | 6.75e-6 | 6.38e-4 | 0.980 |  |
| Site | 1 | 0.0299 | 3.478 | 0.099 |  | 1 | 1.04e-4 | 0.037 | 0.852 |  | 1 | 0.0237 | 4.723 | 0.061 |  | 1 | 0.0037 | 0.350 | 0.570 |  |
| [iHg]\*Site | 1 | 0.0024 | 0.280 | 0.611 |  | 1 | 0.0150 | 5.398 | 0.049 |  | 1 | 0.0023 | 0.453 | 0.520 |  | 1 | 8.17e-4 | 0.0772 | 0.788 |  |
| Error | 8 | 0.0086 |  |  |  | 8 | 0.0028 |  |  |  | 8 | 0.0050 |  |  |  | 8 | 0.0106 |  |  |  |

×Homocedasticity failed (Levene’s test; p<0.05); \*Normality failed (Shapiro-Wilk test; p>0.05). Parametric ANOVA was still run, considering that very few cases occurred and to keep consistency across the analysis.

**Table S2.** Two-way ANOVA summary regarding the inspection of significant effects of iHg concentration, site of origin of tested plants, and their interactions, in leaves, for different oxidative stress and damage endpoints measured following 2 or 4 h of exposure during experiments held during the day or night.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WINTER** | | | | | | | | | | | | | | | | | | | | | |
|  |  | **DAY . t = 2 h** | | | | | **DAY . t = 4 h** | | | | | **NIGHT . t = 2 h** | | | | | **NIGHT . t = 4 h** | | | | |
|  | Source of variation | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  |
| **CAT** | [iHg] | 1 | 1.4967 | 0.15 | 0.709 |  | 1 | 0.174 | 0.0320 | 0.862 |  | 1 | 37.125 | 14.307 | **0.009** |  | 1 | 10.943 | 1.562 | 0.247 |  |
| Site | 1 | 0.0143 | 0.00 | 0.971 | 1 | 0.0246 | 0.00452 | 0.948 | 1 | 1.003 | 0.386 | 0.557 |  | 1 | 6.796 | 0.970 | 0.354 |  |
| [iHg]\*Site | 1 | 358569 | 3.59 | 0.095 | 1 | 8.255 | 1.519 | 0.253 | 1 | 22.362 | 8.618 | **0.026** |  | 1 | 17.487 | 2.496 | 0.153 |  |
| Error | 8 | 10.00 |  |  | 8 | 5.434 |  |  | 6 | 2.595 |  |  |  | 8 | 7.005 |  |  |  |
| **AP** | [iHg] | 1 | 0.24412 | 0.41 | 0.538 |  | 1 | 1.934 | 1.968 | 0.198 |  | 1 | 0.0109 | 2.759 | 0.148 |  | 1 | 9.06e-4 | 0.379 | 0.555 |  |
| Site | 1 | 0.07787 | 0.13 | 0.726 | 1 | 0.553 | 0.563 | 0.475 | 1 | 0.0225 | 0.571 | 0.478 |  | 1 | 0.0589 | 2.461 | 0.155 |  |
| [iHg]\*Site | 1 | 0.87106 | 1.48 | 0.259 | 1 | 1.744 | 1.775 | 0.219 | 1 | 9.06e-4 | 0.230 | 0.649 |  | 1 | 0.0769 | 3.210 | 0.111 |  |
| Error | 8 | 0.59049 |  |  | 8 | 0.983 |  |  | 6 | 0.00394 |  |  |  | 8 | 0.0239 |  |  |  |
| **GP** | [iHg] | 1 | 920.30 | 7.73 | **0.027** |  | 1 | 0.285 | 0.00451 | 0.948 |  | 1 | 1018.40 | 20.608 | **0.002** |  | 1 | 674.443 | 5.179 | 0.052 |  |
| Site | 1 | 77.82 | 0.65 | 0.446 | 1 | 2.708 | 0.0427 | 0.841 | 1 | 39.326 | 0.796 | 0.398 |  | 1 | 95.023 | 0.730 | 0.418 |  |
| [iHg]\*Site | 1 | 95.86 | 0.80 | 0.399 | 1 | 705.500 | 11.135 | **0.010** | 1 | 608.857 | 12.321 | **0.008** |  | 1 | 349.093 | 2.680 | 0.140 |  |
| Error | 7 | 119.10 |  |  | 8 | 63.358 |  |  | 8 | 49.418 |  |  |  | 8 | 130.238 |  |  |  |
| **SOD** | [iHg] | 1 | 8.618 | 6.45 | **0.044** |  | 1 | 47.834 | 12.924 | **0.011** |  | 1 | 10.996 | 11.765 | **0.011** |  | 1 | 0.0467 | 0.0256 | 0.877 |  |
| Site | 1 | 46.136 | 34.53 | **0.001** | 1 | 54.719 | 14.785 | **0.009** | 1 | 9.755 | 10.437 | **0.014** |  | 1 | 0.0288 | 0.0158 | 0.903 |  |
| [iHg]\*Site | 1 | 6.971 | 5.22 | 0.062 | 1 | 36.724 | 9.923 | **0.020** | 1 | 0.604 | 0.646 | 0.448 |  | 1 | 0.271 | 0.148 | 0.710 |  |
| Error | 6 | 1.336 |  |  | 6 | 3.701 |  |  | 7 | 0.935 |  |  |  | 8 | 1.827 |  |  |  |
| **LPO** | [iHg] | 1 | 1.79e-4 | 11.63 | **0.009** |  | 1 | 8.92e-5 | 25.625 | **<0.001** |  | 1 | 2.16e-5 | 1.028 | 0.340 |  | 1 | 1.17e-5 | 1.654 | 0.234 |  |
| Site | 1 | 6.73e-6 | 0.437 | 0.527 | 1 | 1.17e-4 | 33.546 | **<0.001** | 1 | 4.11e-5 | 1.954 | 0.200 |  | 1 | 1.95e-5 | 2.754 | 0.136 |  |
| [iHg]\*Site | 1 | 7.13e-6 | 0.463 | 0.515 | 1 | 3.11e-5 | 8.932 | **0.017** | 1 | 2.22e-5 | 1.052 | 0.335 |  | 1 | 2.76e-5 | 3.888 | 0.084 |  |
| Error | 8 | 1.54e-5 |  |  | 8 | 3.48e-6 |  |  | 8 | 2.11e-5 |  |  |  | 8 | 7.10e-6 |  |  |  |
| **SUMMER** | | | | | | | | | | | | | | | | | | | | | |
|  |  | **DAY . t = 2 h** | | | | | **DAY . t = 4 h** | | | | | **NIGHT . t = 2 h** | | | | | **NIGHT . t = 4 h** | | | |  |
|  | Source of variation | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  |
| **CAT** | [iHg] | 1 | 2256.51 | 3.275 | 0.120 |  | 1 | 64.989 | 0.117 | 0.741 |  | 1 | 2233.06 | 8.815 | **0.025** |  | 1 | 7177.9 | 17.965 | **0.003** |  |
| Site | 1 | 57.499 | 0.083 | 0.782 |  | 1 | 150.720 | 0.271 | 0.617 |  | 1 | 11954.6 | 47.189 | **<0.001** |  | 1 | 149.43 | 0.374 | 0.558 |  |
| [iHg]\*Site | 1 | 33.266 | 0.048 | 0.833 |  | 1 | 1425.55 | 2.561 | 0.148 |  | 1 | 781.344 | 3.084 | 0.130 |  | 1 | 2214.9 | 5.544 | **0.046** |  |
| Error | 9 | 689.074 |  |  |  | 8 | 556.641 |  |  |  | 6 | 253.336 |  |  |  | 8 | 399.55 |  |  |  |
| **SOD** | [iHg] | 1 | 233.539 | 2.828 | 0.136 |  | 1 | 0.0120 | 0.463 | 0.518 |  | 1 | 22.499 | 0.126 | 0.733 |  | 1 | 259.12 | 4.495 | 0.067 |  |
| Site | 1 | 77.259 | 0.936 | 0.366 |  | 1 | 0.381 | 14.679 | **0.006** |  | 1 | 39.507 | 0.222 | 0.652 |  | 1 | 155.13 | 2.691 | 0.140 |  |
| [iHg]\*Site | 1 | 377.358 | 4.570 | 0.070 |  | 1 | 0.0094 | 0.363 | 0.566 |  | 1 | 23.541 | 0.132 | 0.727 |  | 1 | 17.821 | 0.309 | 0.593 |  |
| Error | 7 | 82.572 |  |  |  | 7 | 0.363 |  |  |  | 7 | 178.340 |  |  |  | 8 | 57.651 |  |  |  |
| **LPO** | [iHg] | 1 | 7.61e-5 | 18.71 | **0.003** |  | 1 | 3.42e-6 | 0.839 | 0.386 |  | 1 | 1.10e-4 | 23.393 | **0.001** |  | 1 | 1.62e-4 | 1.910 | 0.204 | × |
| Site | 1 | 5.50e-6 | 1.354 | 0.278 |  | 1 | 1.83e-6 | 0.447 | 0.522 |  | 1 | 1.44e-6 | 0.308 | 0.594 |  | 1 | 1.06e-4 | 1.253 | 0.295 |
| [iHg]\*Site | 1 | 1.63e-5 | 4.008 | 0.080 |  | 1 | 1.01e-7 | 0.0248 | 0.879 |  | 1 | 5.76e-6 | 1.229 | 0.300 |  | 1 | 2.76e-4 | 3.260 | 0.109 |
| Error | 8 | 4.07e-6 |  |  |  | 8 | 4.08e-6 |  |  |  | 8 | 4.69e-6 |  |  |  | 8 | 8.46e-5 |  |  |

×Homocedasticity failed (Levene’s test; p<0.05), despite several attempts to transform the data – parametric ANOVA was still run, considering that very few cases occurred and to keep consistency across the analysis.

**Table S3.** Two-way ANOVA summary regarding the inspection of significant effects of iHg concentration, site of origin of tested plants, and their interactions, in roots, for different oxidative stress and damage endpoints measured following 2 or 4 h of exposure during experiments held during the day or night.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WINTER** | | | | | | | | | | | | | | | | | | | | | |
|  |  | **DAY . t = 2 h** | | | | | **DAY . t = 4 h** | | | | | **NIGHT . t = 2 h** | | | | | **NIGHT . t = 4 h** | | | | |
|  | Source of variation | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  |
| **CAT** | [iHg] | 1 | 2.394 | 0.861 | 0.381 |  | 1 | 1.527 | 0.858 | 0.381 |  | 1 | 0.752 | 0.303 | 0.597 |  | 1 | 9.332 | 3.776 | 0.093 |  |
| Site | 1 | 0.859 | 0.309 | 0.594 | 1 | 0.496 | 0.279 | 0.612 | 1 | 0.0573 | 0.0230 | 0.883 |  | 1 | 0.423 | 0.171 | 0.692 |  |
| [iHg]\*Site | 1 | 0.589 | 0.212 | 0.658 | 1 | 0.162 | 0.0909 | 0.771 | 1 | 0.322 | 0.130 | 0.728 |  | 1 | 4.939 | 1.999 | 0.200 |  |
| Error | 8 | 2.781 |  |  | 8 | 1.780 |  |  | 8 | 2.485 |  |  |  | 7 | 2.471 |  |  |  |
| **AP** | [iHg] | 1 | 0.461 | 1.815 | 0.215 |  | 1 | 0.0186 | 0.0874 | 0.776 |  | 1 | 0.170 | 0.591 | 0.464 |  | 1 | 2.452 | 15.417 | **0.006** | × |
| Site | 1 | 0.0910 | 0.359 | 0.566 | 1 | 0.343 | 1.611 | 0.245 | 1 | 0.276 | 0.958 | 0.356 |  | 1 | 0.517 | 3.251 | 0.114 |
| [iHg]\*Site | 1 | 0.286 | 1.128 | 0.319 | 1 | 0.666 | 3.127 | 0.120 | 1 | 0.548 | 1.907 | 0.205 |  | 1 | 0.103 | 0.645 | 0.448 |
| Error | 8 | 0.254 |  |  | 7 | 0.213 |  |  | 8 | 0.288 |  |  |  | 7 | 0.159 |  |  |
| **GP** | [iHg] | 1 | 71.872 | 7.370 | **0.026** |  | 1 | 3.800 | 0.284 | 0.609 |  | 1 | 48.411 | 3.006 | 0.127 |  | 1 | 2.945 | 0.391 | 0.555 |  |
| Site | 1 | 2.369 | 0.243 | 0.635 | 1 | 11.000 | 0.821 | 0.391 | 1 | 59.562 | 3.698 | 0.096 |  | 1 | 0.121 | 0.0160 | 0.903 |  |
| [iHg]\*Site | 1 | 17.942 | 1.840 | 0.212 | 1 | 1.213 | 0.0906 | 0.771 | 1 | 8.898 | 0.553 | 0.481 |  | 1 | 108.008 | 14.350 | **0.009** |  |
| Error | 8 | 9.751 |  |  | 8 | 13.391 |  |  | 7 | 16.104 |  |  |  | 6 | 7.527 |  |  |  |
| **SOD** | [iHg] | 1 | 1.713 | 6.684 | **0.032** |  | 1 | 3.542 | 16.191 | **0.004** |  | 1 | 2.336 | 3.011 | 0.121 |  | 1 | 1.26e-4 | 0.0142 | 0.908 |  |
| Site | 1 | 0.0342 | 0.133 | 0.724 | 1 | 1.474 | 6.736 | **0.032** | 1 | 0.0546 | 0.0704 | 0.797 |  | 1 | 0.0601 | 6.785 | **0.031** |  |
| [iHg]\*Site | 1 | 0.236 | 0.920 | 0.366 | 1 | 1.789 | 8.178 | **0.021** | 1 | 2.470 | 3.184 | 0.112 |  | 1 | 0.0635 | 7.180 | **0.028** |  |
| Error | 8 | 2.056 |  |  | 8 | 0.219 |  |  | 8 | 0.776 |  |  |  | 8 | 0.00885 |  |  |  |
| **LPO** | [iHg] | 1 | 3.04e-5 | 2.690 | 0.140 |  | 1 | 8.80e-6 | 1.509 | 0.254 |  | 1 | 0.0424 | 1.674 | 0.232 |  | 1 | 9.00e-5 | 2.102 | 0.185 |  |
| Site | 1 | 2.10e-5 | 1.859 | 0.210 | 1 | 3.10e-5 | 5.320 | **0.050** | 1 | 0.292 | 11.505 | **0.009** |  | 1 | 3.34e-5 | 0.780 | 0.403 |  |
| [iHg]\*Site | 1 | 4.86e-6 | 0.430 | 0.530 | 1 | 2.14e-6 | 0.368 | 0.561 | 1 | 1.17e-5 | 4.64e-4 | 0.983 |  | 1 | 3.08e-5 | 0.720 | 0.421 |  |
| Error | 8 | 1.13e-5 |  |  | 8 | 5.83e-6 |  |  | 8 | 0.0253 |  |  |  | 8 | 4.28e-5 |  |  |  |
| **SUMMER** | | | | | | | | | | | | | | | | | | | | | |
|  |  | **DAY . t = 2 h** | | | | | **DAY . t = 4 h** | | | | | **NIGHT . t = 2 h** | | | | | **NIGHT . t = 4 h** | | | |  |
|  | Source of variation | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  |
| **CAT** | [iHg] | 1 | 5715.07 | 6.787 | 0.040 |  | 1 | 491.693 | 1.507 | 0.274 | × | 1 | 3943.41 | 0.415 | 0.548 |  | 1 | 1143.51 | 0.162 | 0.701 | × |
| Site | 1 | 4966.28 | 5.898 | 0.051 |  | 1 | 1000.04 | 3.065 | 0.140 | 1 | 5349.30 | 0.563 | 0.487 |  | 1 | 70878.0 | 10.040 | 0.019 |
| [iHg]\*Site | 1 | 9665.08 | 11.478 | **0.015** |  | 1 | 2293.36 | 7.028 | **0.045** | 1 | 60734.8 | 6.388 | 0.053 |  | 1 | 46848.6 | 6.636 | **0.042** |
| Error | 6 | 842.029 |  |  |  | 8 | 326.317 |  |  | 5 | 9507.69 |  |  |  | 6 | 7059.80 |  |  |
| **SOD** | [iHg] | 1 | 570.109 | 6.759 | **0.035** |  | 1 | 4.141 | 0.0388 | 0.849 |  | 1 | 170.383 | 0.708 | 0.425 |  | 1 | 398.301 | 1.381 | 0.278 |  |
| Site | 1 | 94.071 | 1.115 | 0.326 |  | 1 | 2.517 | 0.0236 | 0.882 |  | 1 | 20.123 | 0.0836 | 0.780 |  | 1 | 326.229 | 1.131 | 0.323 |  |
| [iHg]\*Site | 1 | 242.130 | 2.871 | 0.134 |  | 1 | 37.843 | 0.355 | 0.540 |  | 1 | 1364.44 | 5.669 | **0.044** | \* | 1 | 1232.15 | 4.273 | 0.078 |  |
| Error | 7 | 84.350 |  |  |  | 7 | 106.632 |  |  |  | 8 | 240.697 |  |  |  | 7 | 288.369 |  |  |  |
| **LPO** | [iHg] | 1 | 2.29e-10 | 1.54e-5 | 0.997 |  | 1 | 2.58e-4 | 7.838 | **0.023** | \* | 1 | 3.74e-5 | 4.825 | 0.059 |  | 1 | 3.21e-5 | 7.353 | 0.027 | × |
| Site | 1 | 6.30e-5 | 4.231 | 0.074 |  | 1 | 5.20e-6 | 0.158 | 0.702 | 1 | 2.09e-6 | 0.269 | 0.618 |  | 1 | 7.78e-6 | 1.781 | 0.219 |
| [iHg]\*Site | 1 | 3.61e-7 | 0.0243 | 0.880 |  | 1 | 2.37e-9 | 7.18e-5 | 0.993 | 1 | 2.06e-6 | 0.265 | 0.620 |  | 1 | 7.30e-6 | 1.673 | 0.232 |
| Error | 8 | 1.49e-5 |  |  |  | 8 | 3.29e-5 |  |  | 8 | 7.75e-6 |  |  |  | 8 | 4.37e-6 |  |  |

\* Although the effects of the factor were significant in the omnibus ANOVA, post-hoc tests did not resolve any significant difference between sites or between treatments; ×Homocedasticity failed (Levene’s test; p<0.05), despite several attempts to transform the data – parametric ANOVA was still run, considering that very few cases occurred and to keep consistency across the analysis.

**Table S4.** Two-way ANOVA summary regarding the inspection of significant effects of iHg concentration, site of origin of tested plants, and their interactions, for Fv/Fm measured following 2 or 4 h of exposure in experiments held during the day or night. ANOVA assumptions of normality and homocedasticity were met in all analyses, as confirmed by the Shapiro-Wilk test (p>0.05) and the Levene’s test (p>0.05), respectively.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WINTER** |  | | | | |  | | | | |  | | | | |  | | | |
|  | **DAY . t = 2 h** | | | | | **DAY . t = 4 h** | | | | | **NIGHT . t = 2 h** | | | | | **NIGHT . t = 4 h** | | | |
| Source of variation | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |
| [iHg] | 1 | 1.92e-4 | 2.118 | 0.184 |  | 1 | 0.00811 | 6.581 | **0.033** |  | 1 | 9.36e-4 | 0.476 | 0.510 |  | 1 | 0.00270 | 1.361 | 0.277 |
| Site | 1 | 1.92e-4 | 2.118 | 0.184 | 1 | 0.00224 | 1.818 | 0.214 | 1 | 0.00264 | 1.342 | 0.280 |  | 1 | 0.00546 | 2.753 | 0.136 |
| [iHg]\*Site | 1 | 1.61e-4 | 1.779 | 0.219 | 1 | 0.00480 | 3.894 | 0.084 | 1 | 2.70e-5 | 0.0137 | 0.910 |  | 1 | 9.01e-4 | 0.454 | 0.519 |
| Error | 8 | 9.07e-5 |  |  | 8 | 0.00123 |  |  | 8 | 0.00197 |  |  |  | 8 | 0.00198 |  |  |
| **SUMMER** |  | | | | |  | | | | |  | | | | |  | | | |
|  | **DAY . t = 2 h** | | | | | **DAY . t = 4 h** | | | | | **NIGHT . t = 2 h** | | | | | **NIGHT . t = 4 h** | | | |
| Source of variation | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |  | df | MS | F | P |
| [iHg] | 1 | 6.58e-4 | 0.992 | 0.353 |  | 1 | 2.02e-6 | 0.0016 | 0.969 |  | 1 | 1.20e-4 | 0.0736 | 0.793 |  | 1 | 4.11e-5 | 0.0784 | 0.787 |
| Site | 1 | 1.64e-3 | 2.473 | 0.160 |  | 1 | 1.21e-3 | 0.945 | 0.360 | 1 | 1.83e-3 | 1.120 | 0.321 |  | 1 | 3.98e-4 | 0.760 | 0.409 |
| [iHg]\*Site | 1 | 6.66e-4 | 1.004 | 0.350 |  | 1 | 4.35e-4 | 0.340 | 0.576 | 1 | 2.42e-3 | 1.483 | 0.258 |  | 1 | 2.84e-4 | 0.542 | 0.483 |
| Error | 7 | 0.0047 |  |  |  | 8 | 0.0102 |  |  | 8 | 1.64e-3 |  |  |  | 8 | 5.24e-4 |  |  |