

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																
Source of variation	DAY . t = 2 h				DAY . t = 4 h				NIGHT . t = 2 h				NIGHT . t = 4 h			
	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																
Source of variation	DAY . t = 2 h				DAY . t = 4 h				NIGHT . t = 2 h				NIGHT . t = 4 h			
	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		
SO D	[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		
SO D	[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		
SO	[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		
SO	[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		