

Table 1 Suppl. Correlation matrix among different parameters of melon seedlings pretreated with different melatonin (MT) concentrations and subjected to normal conditions for 7 d. Correlations significant at 0.05 level are marked by *blue* and those significant at 0.01 are marked by *red*.

MT	Leaf area	Plant fresh mass	Chl <i>a</i>	Chl <i>b</i>	Chl <i>a+b</i>	Chl <i>a/b</i>	P _N	g _s	c _i	E	F ₀	F _v /F _m	F _v '/F _m '	ETR	MDA	SOD	POD	CAT
MT	1.000																	
Leaf area	0.964	1.000																
Plant fresh mass	0.856	0.904	1.000															
Chl <i>a</i>	0.884	0.969	1.000															
Chl <i>b</i>	0.946	0.861	0.709	1.000														
Chl <i>a+b</i>	0.960	0.999	0.977	0.844	1.000													
Chl <i>a/b</i>	0.107	0.331	0.552	-0.196	0.361	1.000												
P _N	0.878	0.957	0.997	0.689	0.968	0.569	1.000											
g _s	0.881	0.791	0.865	0.615	0.985	0.767	-0.305	0.584	1.000									
c _i	0.661	0.791	0.536	0.915	0.389	0.815	0.807	0.934	0.256	1.000								
E	0.894	0.821	0.896	0.655	0.986	0.798	-0.249	0.622	0.301	1.000								
F ₀	-0.839	-0.700	-0.444	-0.620	-0.778	-0.708	0.080	-0.651	-0.491	-0.664	1.000							
F _v /F _m	-0.629	-0.645	-0.904	-0.497	-0.768	-0.611	0.195	-0.433	-0.843	-0.861	0.196	1.000						
F _v '/F _m '	0.896	0.761	0.557	0.659	0.863	0.764	-0.121	0.679	0.781	0.767	-0.989	-0.338	1.000					
ETR	0.936	0.915	0.667	0.905	0.784	0.927	0.318	0.924	0.668	0.814	-0.890	-0.329	0.897	1.000				
MDA	-0.962	-0.887	-0.682	-0.822	-0.879	-0.892	-0.091	-0.836	-0.785	-0.660	-0.788	0.410	-0.970	-0.973	1.000			
SOD	0.808	0.692	0.387	0.649	0.699	0.707	0.052	0.688	0.580	0.569	-0.988	-0.088	0.959	0.911	-0.938	1.000		
POD	0.946	0.857	0.853	0.705	1.000	0.841	-0.202	0.686	0.983	0.983	-0.790	-0.755	0.872	0.789	-0.885	0.712	1.000	
CAT	-0.499	-0.255	-0.252	-0.039	-0.683	-0.237	0.765	-0.042	0.247	-0.655	0.699	0.333	-0.731	-0.361	0.564	-0.591	-0.693	1.000

Table 2 Suppl. Correlation matrix among different parameters of melon seedlings pretreated with different melatonin (MT) subjected to cold stress conditions for 7 d. Correlations significant at 0.05 level are marked by *blue* and those significant at 0.01 are marked by *red*.

MT	MT	Leaf area	Plant fresh mass	Chl <i>a</i>	Chl <i>b</i>	Chl <i>a</i> + <i>b</i> .	Chl <i>a</i> / <i>b</i> .	P _N	g _s	c _i	E	F _o	F _v /F _m	F _v '/F _m '	ETR	MDA	SOD	POD	CAT
MT	1.000																		
Leaf area	0.786	1.000																	
Plant fresh mass	0.889	0.806	1.000																
Chl <i>a</i>	0.911	0.912	0.977	1.000															
Chl <i>b</i>	0.998	0.797	0.866	0.901	1.000														
Chl <i>a</i> + <i>b</i> .	0.945	0.903	0.970	0.996	0.937	1.000													
Chl <i>a</i> / <i>b</i> .	0.800	0.982	0.888	0.958	0.800	0.941	1.000												
P _N	0.912	0.881	0.989	0.997	0.897	0.993	0.938	1.000											
g _s	0.969	0.617	0.789	0.789	0.967	0.840	0.628	0.798	1.000										
c _i	-0.719	-0.917	-0.907	-0.940	-0.707	-0.907	-0.974	-0.932	-0.534	1.000									
E	0.996	0.840	0.905	0.939	0.995	0.966	0.851	0.935	0.943	-0.772	1.000								
F _o	-0.975	-0.680	-0.917	-0.891	-0.960	-0.920	-0.732	-0.907	-0.964	0.692	-0.959	1.000							
F _v /F _m	0.873	0.986	0.841	0.937	0.884	0.941	0.967	0.910	0.736	-0.886	0.914	-0.775	1.000						
F _v '/F _m '	0.984	0.750	0.943	0.931	0.970	0.955	0.798	0.942	0.949	-0.757	0.977	-0.995	0.832	1.000					
ETR	0.997	0.817	0.916	0.938	0.994	0.966	0.837	0.938	0.951	-0.767	0.998	-0.973	0.894	0.987	1.000				
MDA	-0.966	-0.907	-0.942	-0.982	-0.963	-0.994	-0.927	-0.975	-0.873	0.870	-0.985	0.926	-0.955	-0.959	-0.981	1.000			
SOD	0.860	0.986	0.813	0.918	0.875	0.925	0.958	0.889	0.724	-0.868	0.902	-0.753	0.999	0.811	0.880	-0.942	1.000		
POD	0.981	0.702	0.921	0.901	0.967	0.930	0.750	0.915	0.965	-0.706	0.968	-0.999	0.795	0.997	0.980	-0.937	0.773	1.000	
CAT	0.990	0.694	0.847	0.853	0.987	0.895	0.710	0.859	0.994	-0.625	0.973	-0.980	0.800	0.975	0.979	-0.922	0.786	0.983	1.000

Table 3 Suppl. Correlation matrix among different parameters of melon seedlings pretreated with different melatonin (MT) subjected to normal conditions for 14 d. Correlations significant at 0.05 level are marked by *blue* and those significant at 0.01 are marked by *red*.

MT	MT	Leaf area	Plant fresh mass	Chl <i>a</i>	Chl <i>b</i>	Chl <i>a+b</i>	Chl <i>a/b</i>	P _N	g _s	c _i	E	F ₀	F _v /F _m	F _v '/F _m '	ETR	MDA	SOD	POD	CAT
MT	1.000																		
Leaf area	0.470	1.000																	
Plant fresh mass	0.963	0.474	1.000																
Chl <i>a</i>	-0.255	-0.153	-0.506	1.000															
Chl <i>b</i>	-0.674	-0.475	-0.846	0.871	1.000														
Chl <i>a+b</i>	-0.422	-0.280	-0.651	0.983	0.947	1.000													
Chl <i>a/b</i>	0.953	0.695	0.892	-0.138	-0.607	-0.320	1.000												
P _N	0.994	0.546	0.941	-0.193	-0.639	-0.368	0.980	1.000											
g _s	0.972	0.254	0.921	-0.203	-0.588	-0.355	0.866	0.948	1.000										
c _i	-0.941	-0.741	-0.914	0.253	0.696	0.429	-0.991	-0.965	-0.837	1.000									
E	0.991	0.498	0.989	-0.375	-0.765	-0.534	0.940	0.980	0.951	-0.945	1.000								
F ₀	-0.947	-0.517	-0.830	-0.056	0.431	0.127	-0.962	-0.969	-0.914	0.919	-0.903	1.000							
F _v /F _m	-0.629	-0.776	-0.769	0.718	0.920	0.817	-0.686	-0.638	-0.466	0.777	-0.713	0.468	1.000						
F _v '/F _m '	0.896	0.454	0.744	0.198	-0.293	0.018	0.917	0.923	0.879	-0.855	0.834	-0.989	-0.338	1.000					
ETR	0.951	0.510	0.998	-0.535	-0.869	-0.678	0.890	0.932	0.898	-0.919	0.983	-0.814	-0.804	0.722	1.000				
MDA	-0.893	-0.816	-0.862	0.213	0.659	0.389	-0.980	-0.929	-0.765	0.992	-0.897	0.892	0.788	-0.831	-0.871	1.000			
SOD	0.975	0.382	0.882	-0.048	-0.496	-0.219	0.929	0.975	0.976	-0.888	0.938	-0.980	-0.454	0.961	0.860	-0.838	1.000		
POD	0.690	-0.046	0.813	-0.730	-0.813	-0.784	0.469	0.609	0.745	-0.507	0.742	-0.436	-0.534	0.341	0.803	-0.408	0.588	1.000	
CAT	-0.903	-0.518	-0.761	-0.167	0.331	0.016	-0.940	-0.935	-0.869	0.886	-0.848	0.993	0.396	-0.997	-0.742	0.868	-0.957	-0.333	1.000

