

Saini D, Bapatla R B, Pandey J, Aswani V, Sunil B, Gahir S, Bharath P, Subramanyam R, Raghavendra A S. Modulation by S-nitrosoglutathione (a natural nitric oxide donor) of photosystem in *Pisum sativum* leaves, as revealed by chlorophyll fluorescence: Light-dependent aggravation of nitric oxide effects. *Plant Science Today*. 2023; 10(2): 393–398.  
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**Supplementary Table S1.** The actual values of PSII parameters on exposure to GSNO under dark, ML and HL. Data are the averages  $\pm$  SE of three independent experiments.

Treatment	Dark	ML	HL
<b>Fv/Fm</b>			
None (Control)	0.7467 $\pm$ 0.0145	0.7033 $\pm$ 0.0120	0.6667 $\pm$ 0.0105
GSNO	0.7033 $\pm$ 0.0115	0.6300 $\pm$ 0.0145	0.6033 $\pm$ 0.0101
<b>ETR (II)</b>			
None (Control)	31.8158 $\pm$ 3.8935	30.6565 $\pm$ 2.0000	30.0792 $\pm$ 1.3610
GSNO	26.1385 $\pm$ 3.6564	27.8463 $\pm$ 1.0000	23.6365 $\pm$ 1.5000
<b>Y (II)</b>			
None (Control)	0.0683 $\pm$ 0.0111	0.0910 $\pm$ 0.0110	0.0899 $\pm$ 0.0112
GSNO	0.062 $\pm$ 0.0800	0.0750 $\pm$ 0.0104	0.0600 $\pm$ 0.0102
<b>Y(NO)</b>			
None (Control)	0.3430 $\pm$ 0.0115	0.3428 $\pm$ 0.0115	0.3426 $\pm$ 0.0115
GSNO	0.3943 $\pm$ 0.0199	0.3933 $\pm$ 0.0197	0.3913 $\pm$ 0.0193
<b>NPQ</b>			
None (Control)	1.6517 $\pm$ 0.0717	1.6617 $\pm$ 0.0717	1.6717 $\pm$ 0.0717
GSNO	1.3587 $\pm$ 0.1117	1.3477 $\pm$ 0.1120	1.3487 $\pm$ 0.1115
<b>Y(NPQ)</b>			
None (Control)	0.5660 $\pm$ 0.01	0.5650 $\pm$ 0.013	0.5680 $\pm$ 0.014
GSNO	0.5310 $\pm$ 0.0186	0.5307 $\pm$ 0.0180	0.5290 $\pm$ 0.0189

**Supplementary Table S2.** The actual values of PSI parameters on exposure to GSNO under dark, ML and HL. Data are the averages  $\pm$  SE of three independent experiments.

Treatment	Dark	ML	HL
<b>Pm</b>			
None (Control)	1.8615 $\pm$ 0.0344	1.7255 $\pm$ 0.0569	1.8965 $\pm$ 0.0682
GSNO	1.8790 $\pm$ 0.0170	1.7220 $\pm$ 0.1198	1.69 $\pm$ 0.0355
<b>ETR(I)</b>			
None (Control)	48.5571 $\pm$ 0.574	54.2341 $\pm$ 0.0924	73.7778 $\pm$ 3.79
GSNO	54.0550 $\pm$ 1.2529	48.8731 $\pm$ 0.5774	66.0148 $\pm$ 1.7321
<b>Y(I)</b>			
None (Control)	11.4355 $\pm$ 0.1328	12.7724 $\pm$ 0.0203	10.750 $\pm$ 0.1302
GSNO	12.7302 $\pm$ 0.2944	10.0000 $\pm$ 0.1443	8.80 $\pm$ 0.1155
<b>Y(NA)</b>			
None (Control)	5.4838 $\pm$ 0.7852	11.5649 $\pm$ 0.7249	9.1118 $\pm$ 0.3290
GSNO	7.8540 $\pm$ 0.4677	6.5647 $\pm$ 0.6353	5.83 $\pm$ 0.4352
<b>Y(ND)</b>			
None (Control)	83.0808 $\pm$ 0.9209	75.6628 $\pm$ 1.0392	72.9635 $\pm$ 1.1691
GSNO	79.4159 $\pm$ 0.1732	81.9255 $\pm$ 0.4503	76.2890 $\pm$ 1.25

**Supplementary Table S3.** The actual values of superoxide and H<sub>2</sub>O<sub>2</sub> on exposure to GSNO under dark, ML and HL. Data are the averages  $\pm$  SE of three independent experiments.

Superoxide ( $\mu\text{g g}^{-1}$ FW)			
Treatment	Dark	ML	HL
None (Control)	51 $\pm$ 4.09	227 $\pm$ 6.92	304 $\pm$ 8.66
GSNO	70 $\pm$ 3.17	351 $\pm$ 13.01	725 $\pm$ 14.43
GSNO+cPTIO	58 $\pm$ 2.02	270 $\pm$ 5.77	560 $\pm$ 11.54
cPTIO	62 $\pm$ 2.90	247 $\pm$ 7.0	326 $\pm$ 8.81

H <sub>2</sub> O <sub>2</sub> ( $\mu\text{mol g}^{-1}$ FW)			
Treatment	Dark	ML	HL
None (Control)	122 $\pm$ 4.35	140 $\pm$ 4.9	160 $\pm$ 6.1
GSNO	153 $\pm$ 6.42	170 $\pm$ 4.33	260 $\pm$ 5.77
GSNO+cPTIO	142 $\pm$ 5.04	138 $\pm$ 5.48	136 $\pm$ 7.37
cPTIO	134 $\pm$ 3.21	149 $\pm$ 2.60	179 $\pm$ 5.9

**Supplementary Figure**



**Figure S1.** The leaf discs of pea (*Pisum sativum*) in 4.2 cm diameter (10 ml) Petri dish.