

Supporting Information

Sensitivity of *Chlamydomonas reinhardtii* to cadmium stress is associated with phototaxis

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1. Table S1. Composition of TAP medium

Component	Concentration ($\mu\text{M L}^{-1}$)	Component	Concentration ($\mu\text{M L}^{-1}$)
(HOCH ₂) ₃ CNH ₂	20000	MnCl ₂ ·4H ₂ O	25.57
K ₂ HPO ₄	620.08	CoCl ₂ ·6H ₂ O	6.77
KH ₂ PO ₄	411.49	CuSO ₄ ·5H ₂ O	6.28
NH ₄ Cl	7478.03	Mo ₇ O ₂₄ (NH ₄) ₆ ·4H ₂ O	0.89
MgSO ₄ ·7H ₂ O	405.73	FeSO ₄ ·7H ₂ O	17.95
CaCl ₂ ·2H ₂ O	340.09	Na ₂ EDTA	134.32
H ₃ BPO ₃	184.38	CH ₃ COOH	17468
ZnSO ₄ ·7H ₂ O	76.51		

2. Table S2 Concentrations of total Cd, predicted concentrations of free Cd²⁺ ions, and predicted major Cd species in TAP medium, calculated using Visual MINTEQ version 3.0.

Total Cd concentration	Predicted free Cd ²⁺ ion concentration ($\mu\text{M L}^{-1}$)	Predicted major species (% of total)
40 $\mu\text{M L}^{-1}$	0.396	CdEDTA ⁻² (96.689%)
		Cd ²⁺ (0.989%)
		Cd-Acetate ⁺ (0.798%)
		CdHPO ₄ (aq) (0.752%)
		CdCl ⁺ (0.44%)
60 $\mu\text{M L}^{-1}$	2.181	CdEDTA ⁻² (87.876%)
		Cd ²⁺ (3.635%)
		Cd-Acetate ⁺ (2.932%)
		CdHPO ₄ (aq) (2.75%)
		CdCl ⁺ (1.623%)