

Nitric Oxide and Sulfur Mediated Reversal of Cadmium-Inhibited Photosynthetic Performance involves Hydrogen Sulfide and Regulation of Nitrogen, Sulfur and Antioxidant Metabolism in Mustard

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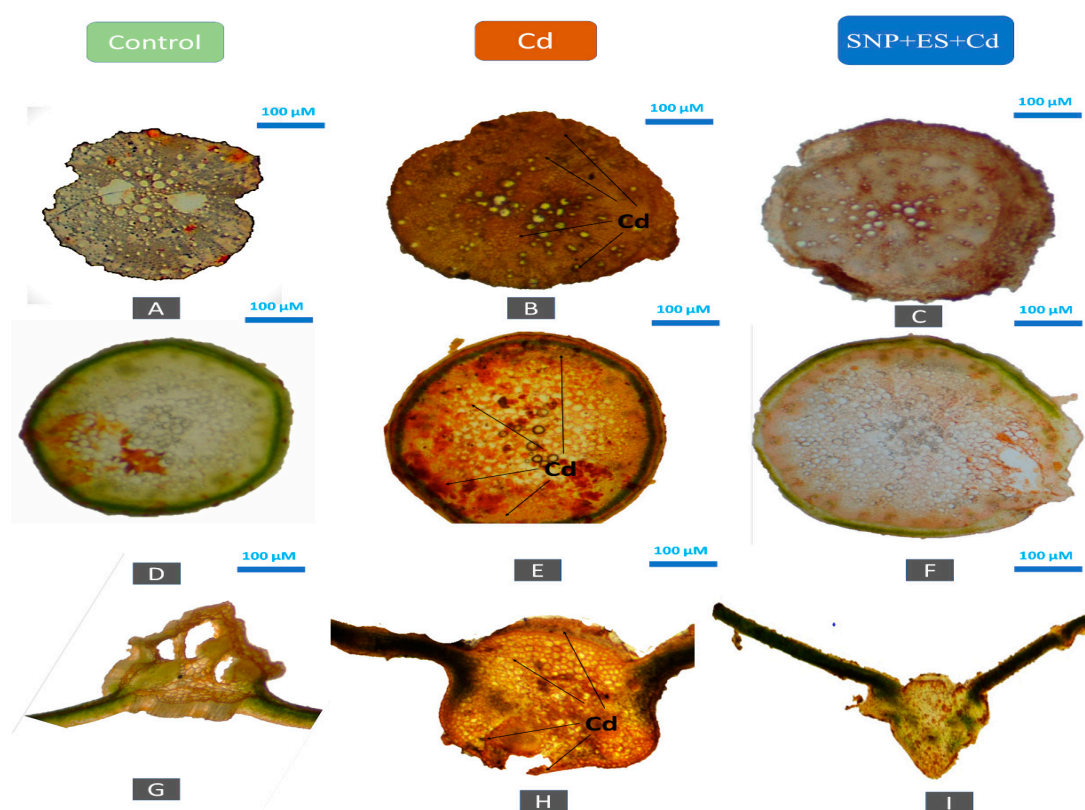


Figure S1. Histochemical localization of Cd in roots (A-C), stem (D-F) and Leaves (G-I) in mustard (*Brassica juncea* L. cv. Giriraj) treated with control (A,D,G), 200 mg Cd kg⁻¹ soil, (B,E,H) and 100 µM SNP (NO donor) + 200 mg S kg⁻¹ soil of elemental sulfur (ES) (C,F,I). cv., cultivar; SNP, sodium nitroprusside.

List of Abbreviations

ATP-S	ATP-sulfurylase
AS	ammonium sulfate
Ci	Internal CO ₂ concentration
cPTIO	2-4-carboxyphenyl-4,4,5,5-tetramethylimidazoline-1-oxyl-3-oxide
Cys	cysteine
DAB	Diaminobenzidine
DAS	Days after sowing
DCF-DA	Dichlorofluorescein diacetate
ES	elemental sulfur
g _s	Stomatal conductance
H ₂ O ₂	Hydrogen peroxide
H ₂ S	hydrogen sulfide
HT	hypotaurine
LA	Leaf area
LSD	Least significant difference
N	nitrogen
NBT	Nitro blue tetrazolium
NO	Nitric oxide
O ₂ ^{•-}	Superoxide anion
OAS-TL	O-acetylserine (thiol) lyase
P _N	Net photosynthetic rate
PCs	phytochelatins
ROS	Reactive oxygen species
SNO	S-nitrosylation
SNP	sodium nitroprusside