Element (mg/kg DW)	Jul. 2020		Sep. 2020		Jul. 2021		Sep. 2021	
	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside
Al	$4486.7\pm275.5b$	$4556.7\pm743.5b$	$2893.4\pm210.6b$	$2634.7\pm228.2b$	$6085.9\pm531.7c$	$4798.0\pm930.1bc$	$4565.2\pm601.5b$	$3826.1\pm395.9b$
Cu	$1121.7 \pm 82.9a$	$1389.0\pm218.6ab$	$868.4\pm87.3a$	$959.2\pm83.1a$	$2718.7\pm442.7b$	$2228.9\pm382.3ab$	$1645.5\pm195.8a$	$2014.4 \pm 184.9 ab$
Fe	$8002.7\pm580.5c$	$9157.4\pm1764.4c$	$5065.4\pm505.1\texttt{c}$	$5752.5\pm502.8c$	$7842.5\pm963.8c$	$8143.8\pm1667.5\texttt{c}$	$7302.8\pm1061.3\text{c}$	$6504.7 \pm 1108.4c$
Mn	$99.6\pm9.4a$	$86.5\pm10.8a$	$100.6\pm16.2a$	$70.9\pm8.8a$	$145.3\pm12.3a$	$157.5\pm38.8a$	$121.0\pm16.3a$	$116.0\pm19.3a$
Zn	$1302.9\pm89.3a$	1712.4 ± 197.2ab	$900.2\pm78.5a$	1175.7 ± 154.5a	$1914.9\pm244.6ab$	$2009.8\pm317.4ab$	$1435.9\pm180.7a$	$1770.0 \pm 161.7 ab$

S2 Table. Comparison of harmful metal concentrations in roots of *Pinus densiflora* seedlings.

2 DW; dry weight. Different letters indicate statistically significant differences among treatments in one-factor ANOVA, Scheffé post-hoc

13 test, P < 0.05 (n = 5). The concentrations of heavy metals in the roots of each *P. densiflora* seedling were analyzed statistically. Results

4 are expressed as mean \pm standard error (SE).

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