

Supplementary Tables and Figures

Role of CrRLK1L cell wall sensors HERCULES1 and 2, THESEUS1, and FERONIA in growth adaptation triggered by heavy metals and trace elements

Supplementary Table 1 Medium compositions

Hoaglands medium	mg/L	1x	1/10
KNO ₃	606.6	6 mM	0.6 mM
Ca(NO ₃) ₂	656.4	4 mM	0.4 mM
MgSO ₄ anhydrous	240.8	2 mM	0.2 mM
NH ₄ H ₂ PO ₄	115.03	1 mM	0.1 mM
H ₃ BO ₃	2.86	46 μM	4.6 μM
Na ₂ EDTA·2H ₂ O	3.35	12 μM	1.2 μM
MoO ₃	0.016	11 μM	1.1 μM
FeSO ₄ ·7H ₂ O	2.5	8 μM	0.8 μM
MnCl ₂ ·4H ₂ O	1.81	9 μM	0.9 μM
ZnSO ₄ ·7H ₂ O	0.22	0.77 μM	0.077 μM
CuSO ₄ ·5H ₂ O	0.08	0.32 μM	0.032 μM

MS medium	mg/L	1x
CaCl ₂	332.0	3 mM
KH ₂ PO ₄	170	1.3 mM
KNO ₃	1900	18.8 mM
MgSO ₄	180.5	1.5 mM
NH ₄ NO ₃	1650	20.6 mM
CoCl ₂ ·6H ₂ O	0.025	0.1 μM
CuSO ₄ ·5H ₂ O	0.025	0.1 μM
FeNaEDTA	36.7	100 μM
H ₃ BO ₃	6.2	100.3 μM
KI	0.83	5.0 μM
MnSO ₄ ·H ₂ O	16.9	100 μM
Na ₂ MoO ₄ ·2H ₂ O	0.25	1.0 μM
ZnSO ₄ ·7H ₂ O	8.6	29.9 μM

Supplementary Table 2 Primers for RT-qPCR

Gene name	AGI number	forward 5'-3'	reverse 5'-3'
AP2M clathrin adaptor complex subunit	At5g46630	GTTTGGGAGAAGAGCGGTTA	CTGATGTCACTGAACCTGAACTG
FER	At3g51550	AGTTTGCTGAAACCGCGATG	TGGAGCTGCAACGCAAATTC
THE1	At5g54380	TTCGGTGGTCTTTGTCAACG	AACGCCAAAGCTTGATCAGG
HERK1	At3g46290	TTCAGCCATTGGTTCGTTGC	TCGAAAACGGCATCCAAGTC
EDGP dermal glycoprotein- like	At5g19110	CTACAATGCTCTTGCTCAGTC	ACCGTCGATAAACGCCAAAC
TUB9	At4g20890	GTACCTTGAAGCTTGCTAATCCTA	GTTCTGGACGTTTCATCATCTGTTC

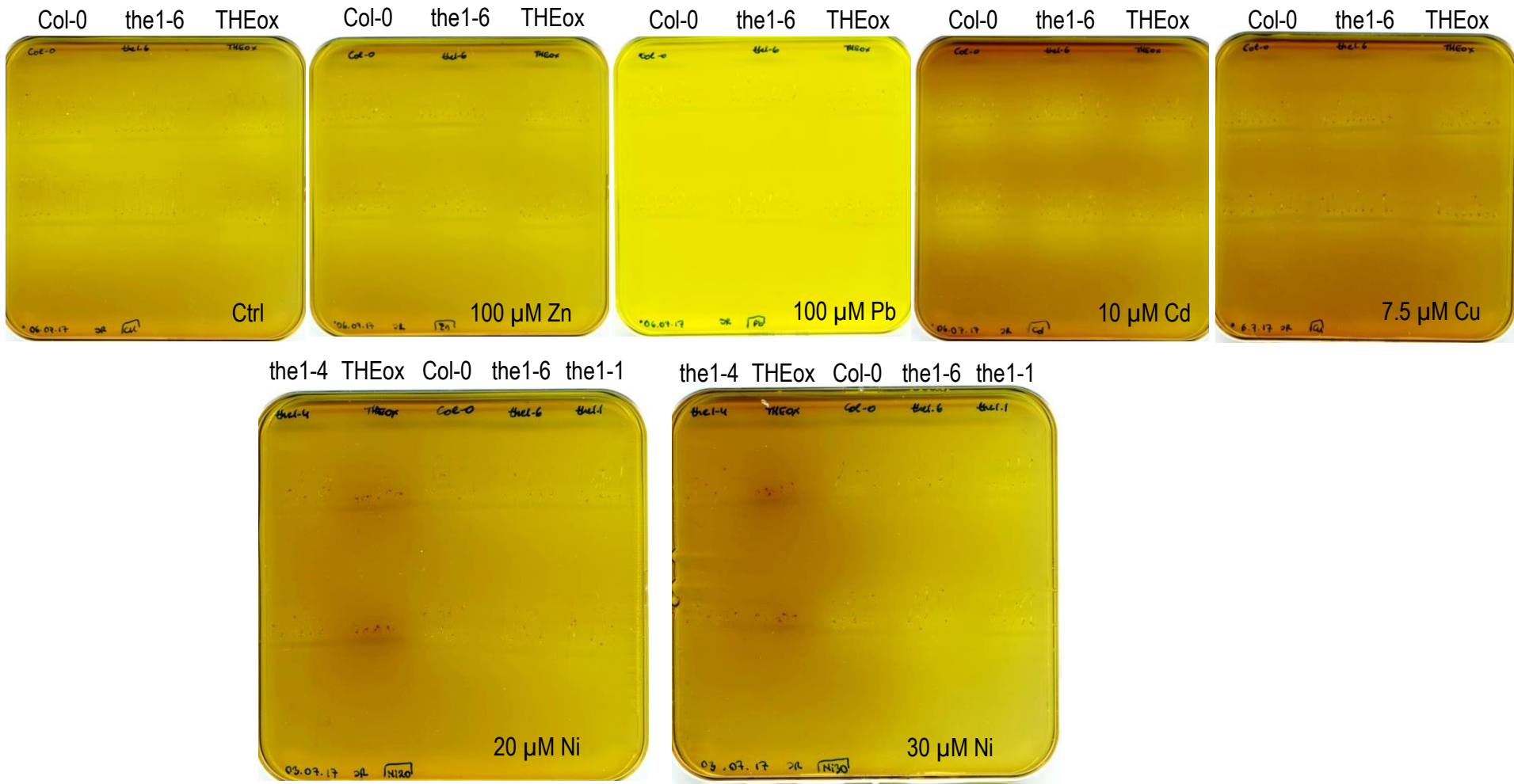


Figure S1 pH indicator experiments of THE1 alleles on control and metalloid containing media.