

Table 1 Suppl. Genes associated with aerenchyma formation in oil palm root under water logging stress for 45 d (inf - infinity).

Function groups	Transcripts	Log ₂ FC	P-value	q-value	Description
Ethylene synthesis	p5_sc00845.V1.gene5	inf	5.00E-05	0.00067	1-aminocyclopropane-1-carboxylate oxidase-like
	p5_sc00039.V1.gene566	inf	5.00E-05	0.00067	1-aminocyclopropane-1-carboxylate oxidase 1-like, putative
Cell wall modification	p5_sc00011.V1.gene637	inf	5.00E-05	0.00067	1-aminocyclopropane-1-carboxylate synthase 3, putative
	p5_sc00004.v1.gene324	3.4422	5.00E-05	0.00067	xyloglucan endotransglucosylase/ hydrolase protein 22
	p5_sc00181.v1.gene48	2.47776	0.00015	0.00165	xyloglucan endotransglucosylase/ hydrolase protein 23
	p5_sc00006.v1.gene834	2.49294	5.00E-05	0.00067	endoglucanase 12
Signal transduction	p5_sc00064.v1.gene402	-3.03552	5.00E-05	0.00067	polygalacturonase
	p5_sc00046.v1.gene168	-2.41503	5.00E-05	0.000674	respiratory burst oxidase homolog protein C-like, putative
	p5_sc00050.v1.gene127	3.71333	5.00E-05	0.00067	cysteine proteinase inhibitor 1
	p5_sc00124.v1.gene115	2.88605	0.00585	0.02839	calmodulin 11
Transcription factors	p5_sc00253.V1.gene84	1.40254	0.00990	0.04110	calmodulin-binding transcription activator 4
	p5_sc00026.V1.gene706	2.54316	0.00310	0.01772	calcium-binding protein CML19
	p5_sc00184.v1.gene176	4.56529	5.00E-05	0.00067	translationally controlled tumor protein
	p5_sc00015.v1.gene732	1.77884	0.00605	0.02902	NAC transcription factor 29
	p5_sc00064.v1.gene250	2.39715	0.00050	0.00438	ethylene-responsive transcription factor 1
	p5_sc00085.v1.gene297	2.53636	0.00705	0.03240	ethylene-responsive transcription factor 1B
	p5_sc00254.v1.gene55	1.90713	0.00540	0.02670	ethylene-responsive transcription factor 91
	p5_sc00057.v1.gene488	3.75071	5.00E-05	0.00067	ethylene-responsive transcription factor 113
	p5_sc00136.v1.gene112	1.43551	0.01135	0.04561	transcription factor bHLH 79
	p5_sc00013.v1.gene897	2.50597	0.00105	0.00777	transcription factor bHLH 93
	p5_sc00049.v1.gene401	2.84212	5.00E-05	0.00067	transcription factor bHLH 94
	p5_sc00450.v1.gene43	2.36027	5.00E-05	0.00067	AP2-like ethylene-responsive transcription factor TOE3
	p5_sc00127.v1.gene161	1.96105	0.00015	0.00165	transcription factor WRKY 1
	p5_sc00363.v1.gene34	1.79861	0.00020	0.00209	transcription factor WRKY 4
	p5_sc00062.v1.gene307	1.51416	0.00490	0.02479	transcription factor MYB1R1
	p5_sc00124.v1.gene6	1.76282	0.00095	0.00715	heat shock protein factor A-2c
	p5_sc00044.v1.gene681	1.45990	0.00465	0.02393	transcription factor BIM2

Table 2 Suppl. Gene-specific primers for real-time quantitative PCR (F - forward, R - reverse, Tm - annealing temperature).

Transcripts No.	Description	Primer Sequences	Tm [°C]
p5_sc00845.V1.gene5	1-aminocyclopropane-1-carboxylate oxidase-like (<i>ACO</i>)	F: CGT GAA GAA GGT CAG CTC T R: TAC TTG AAC TCT GGG GGT GT	65
p5_sc00039.V1.gene566	1-aminocyclopropane-1-carboxylate oxidase 1-like (<i>ACO1</i>)	F: CCA TGG GAT TGA TGA GAG R: GTA GTT CAG GAA TGT CGT CG	55
p5_sc00011.V1.gene637	1-aminocyclopropane-1-carboxylate synthase 3 (<i>ACS3</i>)	F: GAC CTC AAA TGG CGA ACC GG R: CCT GAG TAG ATC TCG TCG CTG	65
p5_sc00004.v1.gene324	xyloglucan endotransglucosylase/ hydrolase protein 22 (<i>XTH22</i>)	F: GTC TAC CCT ACC CCA AGA A R: CGT GCA GTA GTC GTA GAT CA	63
p5_sc00181.v1.gene48	xyloglucan endotransglucosylase/ hydrolase protein 23 (<i>XTH23</i>)	F: ATG GCC TCC TCT GTC TGT R: TAC TCC TGC TTG GAT TGG	55
p5_sc00006.v1.gene834	endoglucanase 12 (<i>CEL12</i>)	F: CTG CAT GGA TGT ACT ACG C R: ACC TCT GGT CCA GTT GAA G	60
p5_sc00064.v1.gene402	polygalacturonase (<i>PG</i>)	F: AGG GAA CAT AAG GGA CTT C R: CAG TAA CAG GAG CCA AGA TG	-
p5_sc00046.v1.gene168	respiratory burst oxidase homolog protein C-like, putative (<i>RBOHC</i>)	F: GTT CTC GAT CAC TTC AGC TC R: TAG GGT CCA TCT ATC AGC AC	-
p5_sc00050.v1.gene127	cysteine proteinase inhibitor 1 (<i>CP11</i>)	F: AGA GCC CTT GCA GTT CTT R: ACA CCT TCT CCC ATA CGA C	63
p5_sc00124.v1.gene115	calmodulin 11 (<i>CML11</i>)	F: GAT ATC CTG ACA GAG GAG CA R: CTT CTT CAG CAT CAG TCT CC	63
p5_sc00026.V1.gene706	calcium-binding protein CML19 (<i>CML19</i>)	F: GTG AGG TCT TTC GAC ACT TC R: GAG GAA GAG GAT GAG GAC TT	-
p5_sc00253.V1.gene84	calmodulin-binding transcription activator 4 (<i>CAMTA4</i>)	F: TGT TAC AGA TCC CAC TCC AC R: GTA TTT GGA CAC TCC TCT GG	63
p5_sc00184.v1.gene176	translationally controlled tumor protein (<i>TCTP</i>)	F: GGT GAG GAT GAA GGA GTT G R: CAT GCA TGC TCT CAC CTA C	65
p5_sc00015.v1.gene732	NAC transcription factor 29 (<i>NAC29</i>)	F: GAC CGA GAG TGG TAC TTC TT R: GAT CCA ACC AGT CTT GAC C	65
p5_sc00064.v1.gene250	ethylene-responsive transcription factor 1 (<i>ERF1</i>)	F: AGA TCC TCG TAA GGG AGT TC R: TGA TCT GGT TCA CCC AAG	62
p5_sc00064.v1.gene250	ethylene-responsive transcription factor 1 (<i>ERF1</i>)	F: AGA TCC TCG TAA GGG AGT TC R: TGA TCT GGT TCA CCC AAG	62
p5_sc00085.v1.gene297	ethylene-responsive transcription factor 1B (<i>ERF1B</i>)	F: GGC TTG GAA CCT TCG ATA R: CCA CAC TCT CTA TCC TCA CC	62
p5_sc00254.v1.gene55	ethylene-responsive transcription factor 91 (<i>ERF91</i>)	F: AGT CCT ACA GAG GCT TCC A R: TGA GGT GTC CCT TAT CTC TG	62
p5_sc00057.v1.gene488	ethylene-responsive transcription factor 113 (<i>ERF113</i>)	F: CAG CAA GAG TAT GGT TAG GG R: TCT CTA CTT TGG AGG AGC TG	60
p5_sc00136.v1.gene112	transcription factor bHLH 79 (<i>bHLH79</i>)	F: AGT CGT CCA AGC TCG TC T R: TGA CCT CTT CTT GCT CTC AC	65
p5_sc00013.v1.gene897	transcription factor bHLH 93 (<i>bHLH93</i>)	F: AGA GCT GCT GGA AAG GAT R: AGG GCC TCT AGA GTG TTC A	-
p5_sc00049.v1.gene401	transcription factor bHLH 94 (<i>bHLH94</i>)	F: GAC TCC TCT TGC TCT TCC TT R: TCG ATG AGA GGT ACT CGT TC	62
p5_sc00127.v1.gene161	transcription factor WRKY 1 (<i>WRKY1</i>)	F: AAG AGG AGG AAG CTG AGA GT R: GAG CAT TGA GGG GTC TTC	-
p5_sc00363.v1.gene34	transcription factor WRKY 4 (<i>WRKY4</i>)	F: AGT GAT GGG TAC AAC TGG AG R: AGG CAC AAC AGA CTG AGT TC	65
p5_sc00062.v1.gene307	transcription factor MYB1R1 (<i>MYB1R1</i>)	F: CGG TCA GTT TTA TCC CGT AG R: CTG TAA CCT GAC CAA GAT GG	62
p5_sc00124.v1.gene6	heat shock protein factor A-2c (<i>HSFA2C</i>)	F: ATG GTG AAG GAG GAG TAC CT R: GTA TCT CGG AAG CAG AGT CA	55
p5_sc00450.v1.gene43	AP2-like ethylene-responsive transcription factor TOE3 (<i>TOE3</i>)	F: CAG CAC CTA TGA AGG AGA AC R: ATA CAT GAT GCG GCT GAC	-
p5_sc00044.v1.gene681	transcription factor BIM2 (<i>BIM2</i>)	F: CTG CTT TAA CAC TGC CTC AG R: CCT AAA CTC TCC AGT GCT TG	-