

Appendix 2d Genes differentially regulated between *A. I. petraea* populations. This table contains the full set of genes that were expressed more highly in Leitrim than Helin (P <0.05, log2 fold change >1).

Probe ID	Fold change (log2)	AGI Code	TAIR annotation
251241_s_at	4.9848	At3g62460 At3g62530	similar to PBS lyase HEAT-like repeat-containing protein [Arabidopsis thaliana] (TAIR:AT3G62530.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO40196.1); contains InterPro domain Protein of unknown function DUF537 (InterPro:IPR007491)
262399_at	3.1048	At1g49500	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT3G19030.1)
246603_at	2.8498	At1g31690	copper ion binding
245757_at	2.7449	At1g35140	PHI-1__PHI-1 (PHOSPHATE-INDUCED 1)
252367_at	2.5597	At3g48360	BT2__BT2 (BTB AND TAZ DOMAIN PROTEIN 2); protein binding / transcription factor/ transcription regulator
250228_at	2.4610	At5g13840	WD-40 repeat family protein
260283_at	2.2613	At1g80480	PTAC17__PTAC17 (PLASTID TRANSCRIPTIONALLY ACTIVE17)
266142_at	2.1909	At2g39030	GCN5-related N-acetyltransferase (GNAT) family protein
266566_at	1.9566	At2g24040	hydrophobic protein, putative / low temperature and salt responsive protein, putative
255479_at	1.9348	At4g02380	ATLEA5_SAG21__SAG21 (SENESCENCE-ASSOCIATED GENE 21)
261410_at	1.8492	At1g07610	MT1C__MT1C (metallothionein 1C)
254804_at	1.8223	At4g13010	oxidoreductase, zinc-binding dehydrogenase family protein
244966_at	1.8147	AtCg00600	PETG__Cytochrome b6-f complex, subunit V. Disruption of homologous gene in Chlamydomonas results in disruption of cytochrome b6-f complex.
263046_at	1.8009	At2g05380	GRP3S__GRP3S (GLYCINE-RICH PROTEIN 3 SHORT ISOFORM)
260568_at	1.7669	At2g43570	chitinase, putative
245611_at	1.6538	At4g14390	ankyrin repeat family protein
245442_at	1.6525	At4g16710	glycosyltransferase family protein 28
248191_at	1.6353	At5g54130	calcium-binding EF hand family protein
252450_s_at	1.5711	At3g47090 At3g47580	leucine-rich repeat transmembrane protein kinase, putative
249125_at	1.5494	At5g43450	2-oxoglutarate-dependent dioxygenase, putative
266474_at	1.5398	At2g31110	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT2G42570.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO69853.1); contains InterPro domain Protein of unknown function DUF231, plant
247439_at	1.4982	At5g62670	AHA11__AHA11 (ARABIDOPSIS H(+)-ATPASE 11); ATPase
255459_at	1.4717	At4g02890	UBQ14__UBQ14 (ubiquitin 14)
249375_at	1.4711	At5g40730	AGP24__AGP24 (ARABINOGALACTAN PROTEIN 24)
247606_at	1.4424	At5g61000	replication protein, putative
260287_at	1.4412	At1g80440	kelch repeat-containing F-box family protein
257623_at	1.4409	At3g26210	CYP71B23__CYP71B23 (cytochrome P450, family 71, subfamily B, polypeptide 23); oxygen binding
259472_at	1.4295	At1g18910	protein binding / zinc ion binding
263365_at	1.4189	At2g20550	DNAJ chaperone C-terminal domain-containing protein
259800_at	1.4079	At1g72175	zinc finger (C3HC4-type RING finger) family protein
254533_at	1.3971	At4g19670	zinc finger (C3HC4-type RING finger) family protein
252437_at	1.3945	At3g47380	invertase/pectin methylesterase inhibitor family protein
263116_s_at	1.3701	At1g03140 At1g54590	splicing factor Prp18 family protein
263478_at	1.3679	At2g31880	leucine-rich repeat transmembrane protein kinase, putative
253403_at	1.3612	At4g32830	ATAUR1__ATAUR1 (ATAURORA1); histone serine kinase(H3-S10 specific) / kinase/ protein serine/threonine kinase

267300_at	1.3536	At2g30140	UDP-glucuronosyl/UDP-glucosyl transferase family protein
260385_at	1.3444	At1g74090	sulfotransferase family protein
246396_at	1.3310	At1g58180	carbonic anhydrase family protein / carbonate dehydratase family protein
252622_at	1.3084	At3g45310	cysteine proteinase, putative
249552_s_at	1.2709	At5g38240 At5g38250	serine/threonine protein kinase, putative
256772_at	1.2687	At3g13750	BGAL1__BGAL1 (BETA GALACTOSIDASE 1); beta-galactosidase
260419_at	1.2585	At1g69730	protein kinase family protein
265075_at	1.2578	At1g55450	embryo-abundant protein-related
267391_at	1.2567	At2g44480	glycosyl hydrolase family 1 protein
266583_at	1.2432	At2g46220	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT1G79510.2); similar to unknown protein [Arabidopsis thaliana] (TAIR:AT1G16320.1); similar to unknown protein [Arabidopsis thaliana] (TAIR:AT1G79510.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO39696.1); contains domain NTF2-like (SSF54427)
245987_at	1.2409	At5g13180	ANAC083__ANAC083 (Arabidopsis NAC domain containing protein 83); transcription factor
248190_at	1.2243	At5g54130	calcium-binding EF hand family protein
262635_at	1.2219	At1g06570	PDS1__HPD__PDS1 (PHYTOENE DESATURATION 1)
267392_at	1.2187	At2g44490	PEN2__PEN2 (PENETRATION 2); hydrolase, hydrolyzing O-glycosyl compounds
261438_at	1.2158	At1g07590 At1g07600	pentatricopeptide (PPR) repeat-containing protein
251221_at	1.2155	At3g62550	universal stress protein (USP) family protein
259015_at	1.2147	At3g07350	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT3G25240.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO38687.1); contains InterPro domain Protein of unknown function DUF506, plant
251775_s_at	1.2015	At2g39800 At3g55610	P5CS1__ATP5CS__P5CS1 (DELTA1-PYRROLINE-5-CARBOXYLATE SYNTHASE 1)
245895_at	1.1928	At5g09230	SRT2__SRT2
247632_at	1.1744	At5g60460	sec61beta family protein
246034_at	1.1739	At5g08350	GRAM domain-containing protein / ABA-responsive protein-related
249810_at	1.1673	At5g23920	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT5G52420.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO49441.1)
255243_at	1.1581	At4g05590	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT4G22310.1); similar to unknown [Populus trichocarpa] (GB:ABK93494.1); contains InterPro domain Protein of unknown function UPF0041 (InterPro:IPR005336)
245765_at	1.1577	At1g33600	leucine-rich repeat family protein
251647_at	1.1544	At3g57770	protein kinase, putative
254505_at	1.1440	At4g19985	GCN5-related N-acetyltransferase (GNAT) family protein
257925_at	1.1386	At3g23170	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT4G14450.1)
263142_at	1.1336	At1g65230	similar to hypothetical protein [Vitis vinifera] (GB:CAN76393.1)
257194_at	1.1238	At3g13110	AtSerat2;2__SAT-1__SAT3__SAT-A__AtSerat2;2 (SERINE ACETYLTRANSFERASE 1); serine O-acetyltransferase
266322_at	1.1182	At2g46690	auxin-responsive family protein
260560_at	1.1147	At2g43590	chitinase, putative
248905_at	1.1108	At5g46250	RNA recognition motif (RRM)-containing protein
262803_at	1.1104	At1g21000	zinc-binding family protein
257939_at	1.1073	At3g19930	STP4__STP4 (SUGAR TRANSPORTER 4); carbohydrate transmembrane transporter/ sugar:hydrogen ion symporter
263614_at	1.1066	At2g25240	serine-type endopeptidase inhibitor
253048_at	1.1013	At4g37560	formamidase, putative / formamide amidohydrolase, putative
262188_at	1.0930	At1g77810	galactosyltransferase family protein
265768_at	1.0849	At2g48020	sugar transporter, putative
266951_at	1.0812	At2g18940	pentatricopeptide (PPR) repeat-containing protein

250829_at	1.0786	At5g04720	ADR1-L2__ADR1-L2 (ADR1-LIKE 2); ATP binding / nucleoside-triphosphatase/ nucleotide binding / protein binding
247545_at	1.0770	At5g61530	small G protein family protein / RhoGAP family protein
266761_at	1.0645	At2g47130	short-chain dehydrogenase/reductase (SDR) family protein
255478_at	1.0624	At4g02440	EID1__EID1 (EMPFINDLICHER IM DUNKELROTEN LICHT 1)
251024_at	1.0619	At5g02180	amino acid transporter family protein
264121_at	1.0598	At1g02280	TOC33_PPI1__TOC33 (PLASTID PROTEIN IMPORT 1)
264446_at	1.0578	At1g27310	NTF2A__NTF2A (NUCLEAR TRANSPORT FACTOR 2A); Ran GTPase binding / protein transporter
262811_at	1.0576	At1g11700	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT1G61930.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO17934.1); contains InterPro domain Protein of unknown function DUF584
254818_at	1.0568	At4g12470	protease inhibitor/seed storage/lipid transfer protein (LTP) family protein
245264_at	1.0526	At4g17245	zinc finger (C3HC4-type RING finger) family protein
255116_at	1.0480	At4g08850	leucine-rich repeat family protein / protein kinase family protein
265472_at	1.0449	At2g15580	zinc finger (C3HC4-type RING finger) family protein
249894_at	1.0421	At5g22580	Identical to Uncharacterized protein At5g22580 [Arabidopsis Thaliana] (GB:Q9FK81); similar to stable protein 1-related [Arabidopsis thaliana] (TAIR:AT3G17210.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN68720.1); contains InterPro domain Dimeric alpha-beta barrel (InterPro:IPR011008); contains InterPro domain Stress responsive alpha-beta barrel (InterPro:IPR013097)
265499_at	1.0226	At2g15480	UGT73B5__UGT73B5 (UDP-GLUCOSYL TRANSFERASE 73B5); UDP-glycosyltransferase/ transferase, transferring glycosyl groups
260603_at	1.0222	At1g55960	similar to unknown protein [Arabidopsis thaliana] (TAIR:AT3G13062.2); similar to unknown protein [Arabidopsis thaliana] (TAIR:AT3G13062.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO41766.1); contains InterPro domain Lipid-binding START (InterPro:IPR002913)
261366_at	1.0173	At1g53100	acetylglucosaminyltransferase
245010_at	1.0170	AtCg00420	NDHJ__Encodes NADH dehydrogenase subunit J. Its transcription is increased upon sulfur depletion.
259502_at	1.0151	At1g15670	kelch repeat-containing F-box family protein
254286_at	1.0097	At4g22950	AGL19_GL19__AGL19 (AGAMOUS-LIKE 19); transcription factor
256337_at	1.0055	At1g72060	serine-type endopeptidase inhibitor
260875_at	1.0051	At1g21410	SKP2A__SKP2A; protein binding
248995_at	1.0005	At5g45260	RRS1_ATWRKY52_SLH1__RRS1 (RESISTANT TO RALSTONIA SOLANACEARUM 1)