

Table S3. Up-regulated miRNAs in the roots of Pi starved-WT plants and expression of the

miRNA	Col-Root P+	Col-Root P-	<i>hps8</i> -Root P+	<i>hps8</i> -Root P-
miR156g	8.269341353	27.85466256	9.08719911	12.48407902
miR157d	36.57593291	81.31103704	32.38347319	74.80379609
miR167d	4.134670677	8.602175203	0.991330812	5.436615059
miR167b	1385.432728	4748.605526	470.8821357	1119.741346
miR167a	1385.432728	4748.605526	470.8821357	1119.741346
miR167c	104.9570249	210.1388514	57.3319653	135.109952
miR171a	1.272206362	3.48183282	0.330443604	1.006780566
miR172b-5p	1.590257953	5.734783469	1.486996218	2.11423919
miR172e	30.85100428	70.25109749	10.40897353	35.64003205
miR172d	5.724928629	13.51770389	3.800101446	11.77933263
miR172c	5.724928629	13.51770389	3.800101446	11.77933263
miR397b	47.38968699	198.2596571	58.15807431	544.3662523
miR398c	74.74212377	217.102517	74.1845891	472.1800857
miR398b	74.74212377	217.102517	74.1845891	472.1800857
miR399a	1.272206362	61.64892229	1.486996218	107.2221303
miR399b	9.541547715	280.5947626	8.095868298	375.2271171
miR399c	9.541547715	280.5947626	8.095868298	375.2271171
miR399f	20.35530179	3126.685873	42.79244672	4489.53658
miR399d	1.908309543	140.7070087	3.469657842	206.4906942
miR408	251.5788081	713.9805419	151.1779488	842.9773683
miR447a.2-3p	3.816619086	8.397361508	12.72207875	7.450176192
miR779.2	0.318051591	2.662578039	3.469657842	1.409492793
miR827	55.34097675	2700.8782	44.44466474	1074.033508
miR833b	0.636103181	2.048136953	2.47832703	3.624410039
miR834	0.318051591	2.252950649	1.156552614	0.90610251
miR838	0.318051591	1.433695867	1.321774416	0.503390283
miR839	24.48997247	63.49224555	18.17439822	17.31662574
miR843	0.318051591	0.819254781	0.660887208	0.30203417
miR852	0.954154772	2.252950649	1.321774416	1.610848906
miR2111b-3p	0.954154772	17.20435041	0.165221802	7.651532305
miR2111a-5p	4.770773858	481.312184	2.643548832	252.2992099
miR2111b-5p	4.770773858	481.312184	2.643548832	252.2992099
miR3440b-3p	0.636103181	1.843323258	2.643548832	0.704746397
miR5012	0.636103181	1.433695867	1.321774416	2.11423919
miR5629	3.180515905	10.85512585	6.278428476	12.68543514
miR5642a	0.954154772	2.252950649	2.313105228	2.214917246
miR5642b	0.954154772	2.252950649	2.313105228	2.214917246
miR5650	2.862464315	6.55403825	5.617541268	3.322375869
miR5651	17.17478589	36.04721038	12.22641335	21.54510412
miR5652	0.318051591	0.819254781	0.82610901	0.30203417
miR5653	0.318051591	1.024068477	1.156552614	0.402712227
miR5656	0.318051591	1.228882172	1.982661624	1.107458623
miR5663	0.318051591	1.843323258	0.82610901	0.503390283

se miRNAs in *hps8* under P+ and P- conditions. (Units of the number in the

<u>log2(Col-Root_P-/Col-Root_P+)</u>	<u>log2(<i>hps8</i>-Root_P-/Col-Root_P-)</u>
1.7519	-1.157829444
1.15252	-0.12033971
1.05658	-0.661992834
1.77717	-2.084338398
1.77717	-2.084338398
1.00153	-0.637208973
1.45138	-1.79009766
1.84957	-1.439600413
1.18716	-0.97902213
1.23927	-0.198592313
1.23927	-0.198592313
2.06472	1.45718649
1.53836	1.120960744
1.53836	1.120960744
5.59754	0.798455125
4.87797	0.419276012
4.87797	0.419276012
7.26301	0.52193225
6.2035	0.553382574
1.50487	0.239609142
1.13726	-0.172661553
3.06096	-0.91764771
5.60891	-1.330389577
1.68471	0.823433993
2.81995	-1.314069531
2.16788	-1.509989741
1.37433	-1.874422564
1.36052	-1.439600413
1.23801	-0.483994532
4.1709	-1.168952823
6.6563	-0.931837256
6.6563	-0.931837256
1.53271	-1.387132993
1.17014	0.560399587
1.77059	0.224796555
1.23801	-0.024562914
1.23801	-0.024562914
1.19462	-0.980168794
1.06951	-0.742527546
1.36052	-1.439600413
1.68245	-1.346491008
1.94548	-0.150093796
2.53045	-1.87255982

e column 4-7 is RPM) (-): Target unknown.

target_gene

AT5G38610:Invertase/pectin methylesterase inhibitor family protein

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AT2G45160:Scarecrow transcription factor family protein||AT3G60630:Scarecrow transcription factor family

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AT3G54990:SMZ (SCHLAFMUTZE)

AT4G36920:AP2 (APETALA 2)

AT4G36920:AP2 (APETALA 2)

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AT2G33770:PHO2/UBC24 (PHOSPHATE 2)

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AT2G02850:ARPN (PLANTACYANIN)

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AT1G02860:SPX (SYG1/Pho81/XPR1)

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protein||AT4G00150:Scarecrow-like transcription factor 6 (SCL6)