

Table S1. Precursors of Brachypodium miRNAs.

¹miRNA gene families were grouped based on the sequence similarity of the mature miRNAs. Strand ratio is the ratio of the sum of TP2M values from the most abundant small RNAs, to the sum of all the small RNAs matching a miRNA precursor. The abundance ratio is the ratio of the sum of TP2M values of the small RNAs matching the same strand of a precursor, to the sum of TP2M values of the small RNAs matching both strands.

Family	Precursor	Chr.	Strand	Start	End	Strand Ratio	Abundance Ratio	Pipeline	Classification	miRbase19
156/529	Bdi-MIR156b	3	-	39,258,133	39,258,291	1	0.99	S	conserved	annotated ³
	Bdi-MIR156c	3	-	4,336,042	4,336,153	1	0.99	S	conserved	annotated ³
	Bdi-MIR156d	5	-	18,202,193	18,202,324	1	0.99	S	conserved	annotated ³
	Bdi-MIR156e	2	+	4,030,441	4,030,592	1	0.98	S	conserved	newly identified
	Bdi-MIR156f	2	+	4,030,530	4,030,732	1	0.98	S	conserved	newly identified
	Bdi-MIR156g	2	+	4,030,923	4,031,015	1	0.98	S	conserved	newly identified
	Bdi-MIR156h	3	-	49,973,606	49,973,693	1	0.99	S	conserved	newly identified
	Bdi-MIR156i	4	+	36,168,970	36,169,104	1	0.98	S	conserved	newly identified
	Bdi-MIR156j	4	-	38,856,201	38,856,309	1	0.99	S	conserved	newly identified
Bdi-MIR529	3	+	44,898,503	44,898,618	1	0.92	S	conserved	annotated ²	
159/319	Bdi-MIR159b	2	+	1,091,343	1,091,535	1	0.89	S	conserved	newly identified
	Bdi-MIR159c	1	-	302,390	302,552	1	0.98	S	conserved	newly identified
	Bdi-MIR319a	4	+	31,253,311	31,253,546	0.99	0.86	S	conserved	annotated ^{2,3}
	Bdi-MIR319b	2	-	45,992,393	45,992,578	1	0.81	S	conserved	annotated ²
160	Bdi-MIR160a	1	-	4,550,728	4,550,853	1	0.92	S	conserved	annotated ³
	Bdi-MIR160b	1	-	28,020,440	28,020,529	1	0.93	S	conserved	annotated ³
	Bdi-MIR160c	3	-	3,414,603	3,414,697	1	0.94	S	conserved	annotated ³
	Bdi-MIR160d	3	+	12,734,311	12,734,423	1	0.94	S	conserved	annotated ³
	Bdi-MIR160e	3	+	41,554,298	41,554,416	1	0.98	S	conserved	annotated ³
	Bdi-MIR160f	5	-	19,337,418	19,337,548	1	0.92	S	conserved	newly identified
162	Bdi-MIR162	3	+	49,591,993	49,592,143	1	1	H	conserved	annotated ²
164	Bdi-MIR164a	2	-	19,949,340	19,949,500	0.99	0.94	S	conserved	annotated ^{2,3}
	Bdi-MIR164b	1	+	14,544,043	14,544,193	1	0.98	S	conserved	annotated ³
	Bdi-MIR164c	3	-	59,107,108	59,107,181	1	0.69	H	conserved	annotated ³
	Bdi-MIR164e	2	-	26,808,991	26,809,097	1	0.99	S	conserved	annotated ²
166	Bdi-MIR166a	1	+	6,574,370	6,574,504	1	0.92	S	conserved	annotated ^{1,3}
	Bdi-MIR166b	1	-	30,655,630	30,655,851	1	0.94	S	conserved	annotated ³
	Bdi-MIR166c	3	+	33,098,776	33,098,923	1	0.92	S	conserved	annotated ³
	Bdi-MIR166d	1	-	71,419,403	71,419,518	1	0.93	S	conserved	annotated ³
	Bdi-MIR166e	3	+	51,437,882	51,438,002	1	0.94	S	conserved	annotated ³

	Bdi-MIR166f	4	-	6,090,880	6,090,999	1	0.89	S	conserved	annotated ³
	Bdi-MIR166g	4	+	37,627,843	37,628,050	1	0.87	H	conserved	annotated ³
	Bdi-MIR166h	3	+	57,427,325	57,427,477	1	0.93	S	conserved	newly identified
	Bdi-MIR166i	3	-	27,457,693	27,457,817	1	0.94	S	conserved	newly identified
	Bdi-MIR166j	3	+	57,427,224	57,427,375	1	0.75	S	conserved	newly identified
167	Bdi-MIR167a	1	+	6,349,049	6,349,174	1	0.97	S	conserved	annotated ^{1,3}
	Bdi-MIR167b	1	+	3,770,025	3,770,170	1	0.96	S	conserved	annotated ³
	Bdi-MIR167c	1	+	54,067,084	54,067,222	1	0.97	S	conserved	annotated ³
	Bdi-MIR167d	3	-	3,632,427	3,632,586	1	0.97	S	conserved	annotated ³
	Bdi-MIR167e	4	-	1,641,428	1,641,565	1	0.97	S	conserved	newly identified
	Bdi-MIR167f	4	-	1,643,731	1,643,832	1	0.97	S	conserved	newly identified
	Bdi-MIR167g	1	-	71,590,930	71,591,103	1	0.97	S	conserved	newly identified
168	Bdi-MIR168	3	-	1,774,720	1,774,823	1	0.99	S	conserved	annotated ^{2,3}
169	Bdi-MIR169a	2	+	7,704,155	7,704,288	1	0.65	H	conserved	newly identified
	Bdi-MIR169b	1	-	27,159,079	27,159,231	1	0.77	S	conserved	annotated ^{1,3}
	Bdi-MIR169c	5	-	23,763,877	23,764,012	1	0.79	S	conserved	annotated ³
	Bdi-MIR169d	4	+	26,242,415	26,242,581	1	0.72	S	conserved	annotated ³
	Bdi-MIR169e	3	+	43,441,523	43,441,689	1	0.87	S	conserved	annotated ³
	Bdi-MIR169g	3	+	43,444,486	43,444,666	1	0.75	H	conserved	annotated ³
	Bdi-MIR169h	5	-	11,563,844	11,563,989	1	0.83	S	conserved	annotated ³
	Bdi-MIR169j	4	+	44,513,754	44,513,936	1	0.68	H	conserved	annotated ³
	Bdi-MIR169k	1	+	1,175,438	1,175,583	1	0.64	H	conserved	annotated ³
	Bdi-MIR169l	4	-	35,762,160	35,762,251	1	0.88	H	conserved	newly identified
	Bdi-MIR169m	3	+	58,636,718	58,636,827	1	0.85	S	conserved	newly identified
	Bdi-MIR169n	1	-	11,346,973	11,347,080	1	0.9	S	conserved	newly identified
171	Bdi-MIR171b	1	+	6,911,151	6,911,282	1	0.98	S	conserved	annotated ³
	Bdi-MIR171c	5	-	24,711,137	24,711,229	1	0.99	H	conserved	annotated ¹
	Bdi-MIR171d	1	-	72,765,318	72,765,447	1	0.96	S	conserved	annotated ³
	Bdi-MIR171e	1	-	30,824,648	30,824,742	1	0.98	S	conserved	newly identified
	Bdi-MIR171f	5	+	21,672,257	21,672,347	1	0.91	S	conserved	newly identified
172	Bdi-MIR172a	3	-	55,737,324	55,737,434	1	0.99	S	conserved	annotated ³
	Bdi-MIR172b	2	-	58,915,775	58,915,988	1	0.89	S	conserved	annotated ³
390	Bdi-MIR390a	1	+	2,722,080	2,722,265	0.99	0.73	S	conserved	annotated ³
393	Bdi-MIR393a	2	-	2,001,028	2,001,136	1	0.88	S	conserved	annotated ^{2,3}
	Bdi-MIR393b	5	+	27,613,851	27,613,959	1	0.53	H	conserved	annotated ³
394	Bdi-MIR394	3	-	52,316,402	52,316,543	1	0.87	S	conserved	annotated ^{2,3}
395	Bdi-MIR395a	4	+	16,374,451	16,374,593	0.99	0.94	S	conserved	annotated ^{2,3}
	Bdi-MIR395b	1	-	55,440,734	55,440,819	0.99	0.95	S	conserved	annotated ^{2,3}
	Bdi-MIR395c	5	+	25,455,924	25,456,053	0.94	0.87	H	conserved	annotated ^{2,3}
	Bdi-MIR395d	3	-	14,764,322	14,764,424	1	0.66	H	conserved	annotated ³
	Bdi-MIR395e	5	+	25,455,201	25,455,340	0.99	0.85	S	conserved	annotated ²

	Bdi-MIR395f	5	+	25,455,484	25,455,612	0.97	0.83	S	conserved	annotated ²
	Bdi-MIR395g	5	+	25,455,725	25,455,811	0.95	0.87	S	conserved	annotated ²
	Bdi-MIR395h	5	+	25,455,887	25,455,952	0.91	0.81	H	conserved	annotated ²
	Bdi-MIR395j	5	+	25,456,063	25,456,189	0.95	0.44	H	conserved	annotated ²
	Bdi-MIR395k	5	+	25,456,199	25,456,328	0.95	0.44	H	conserved	annotated ²
	Bdi-MIR395l	5	+	25,456,562	25,456,657	0.97	0.88	H	conserved	annotated ²
	Bdi-MIR395m	1	-	55,440,157	55,440,247	1	0.96	S	conserved	annotated ²
	Bdi-MIR395n	5	+	25,457,119	25,457,204	0.93	0.87	S	conserved	annotated ²
	Bdi-MIR395o	1	-	55,440,489	55,440,616	0.94	0.87	S	conserved	newly identified
	Bdi-MIR395p	5	+	25,456,423	25,456,522	0.61	0.41	H	conserved	newly identified
	Bdi-MIR395q	5	+	25,456,843	25,456,926	0.99	0.97	S	conserved	newly identified
396	Bdi-MIR396a	3	-	59,349,800	59,349,975	1	0.94	S	conserved	annotated ^{2,3}
	Bdi-MIR396b	5	+	27,112,486	27,112,628	1	0.96	S	conserved	annotated ³
	Bdi-MIR396c	3	-	54,968,153	54,968,275	1	0.57	H	conserved	annotated ³
	Bdi-MIR396d	1	-	46,677,004	46,677,155	1	0.56	H	conserved	annotated ³
	Bdi-MIR396e	3	+	54,962,856	54,963,007	1	0.62	H	conserved	annotated ³
397	Bdi-MIR397a	3	-	3,149,714	3,149,810	1	0.93	S	conserved	annotated ^{1,3}
	Bdi-MIR397b	3	-	3,177,772	3,177,886	1	0.93	S	conserved	newly identified
398	Bdi-MIR398a	2	-	35,924,432	35,924,545	1	0.66	H	conserved	annotated ³
	Bdi-MIR398b	3	+	21,918,241	21,918,359	1	0.47	H	conserved	annotated ³
399	Bdi-MIR399b	3	+	7,135,280	7,135,410	1	0.53	H	conserved	annotated ³
	Bdi-MIR399c	2	+	16,765,663	16,765,802	0.88	0.82	H	conserved	newly identified
	Bdi-MIR399d	3	-	7,132,920	7,133,061	1	0.93	S	conserved	newly identified
408	Bdi-MIR408	2	+	10,450,362	10,450,513	1	0.46	H	conserved	annotated ^{4,3}
444	Bdi-MIR444a	3	+	38,887,737	38,888,859	1.00	0.93	M	conserved	newly identified
	Bdi-MIR444b	3	+	56,701,604	56,704,223	1.00	0.58	M	conserved	newly identified
	Bdi-MIR444c	3	-	48,666,800	48,671,168	1.00	0.56	M	conserved	newly identified
	Bdi-MIR444d	5	-	15,919,916	15,922,479	1.00	0.60	M	conserved	newly identified
528	Bdi-MIR528	1	-	73,059,633	73,059,853	1	0.99	S	conserved	annotated ^{2,3}
530	Bdi-MIR530a	5	-	16,956,517	16,956,678	1	0.83	H	conserved	newly identified
	Bdi-MIR530b	5	-	16,956,889	16,957,043	0.99	0.63	H	conserved	newly identified
531	Bdi-MIR531	2	+	9,542,419	9,542,492	1	0.78	S	conserved	newly identified
827	Bdi-MIR827	5	-	18,037,487	18,037,635	1	0.89	S	conserved	annotated ^{2,3}
845	Bdi-MIR845	3	-	17,791,439	17,791,533	0.97	0.91	S	conserved	newly identified
1432	Bdi-MIR1432	1	+	18,961,246	18,961,366	1	0.92	S	conserved	newly identified
2118	Bdi-MIR2118a	5	-	13,861,046	13,861,241	1	0.83	M	conserved	newly identified
	Bdi-MIR2118b	5	-	13,861,144	13,861,372	1	0.67	M	conserved	newly identified
2275	Bdi-MIR2275a	3	+	12,513,972	12,514,077	1	0.92	S	conserved	newly identified
	Bdi-MIR2275b	3	+	13,941,819	13,941,925	1	0.98	S	conserved	newly identified
	Bdi-MIR2275c	3	+	12,514,129	12,514,225	0.99	0.78	H	conserved	newly identified

5163	Bdi-MIR5163a	4	-	11,947,799	11,948,046	1	0.9	H	annotated	annotated ³
	Bdi-MIR5163b	4	-	11,948,707	11,948,885	1	0.93	S	novel	newly identified
5169	Bdi-MIR5169	4	-	42,248,188	42,248,351	0.98	0.81	S	annotated	annotated ³
	Bdi-MIR5169b	5	-	20,527,418	20,527,519	0.93	0.89	S	annotated	newly identified
5171	Bdi-MIR5171b	2	-	11,086,341	11,086,534	0.91	0.42	H	annotated	newly identified
5173	Bdi-MIR5173	1	-	22,135,908	22,136,071	1	0.79	S	annotated	annotated ³
5174	Bdi-MIR5174b	2	+	38,216,527	38,216,583	0.94	0.76	S	annotated	newly identified
	Bdi-MIR5174d	4	+	47,097,725	47,097,810	0.91	0.79	S	annotated	newly identified
	Bdi-MIR5174f	3	-	18,576,851	18,576,934	0.9	0.86	S	annotated	newly identified
5176	Bdi-MIR5176	1	-	28,306,180	28,306,285	0.99	0.77	S	annotated	annotated ²
5178	Bdi-MIR5178	3	-	8,463,679	8,463,864	1	0.5	H	annotated	annotated ³
5179	Bdi-MIR5179	3	-	9,493,281	9,493,494	1	0.93	S	conserved	annotated ³
5181	Bdi-MIR5181c	2	-	22,827,671	22,827,757	0.97	0.85	S	annotated	newly identified
	Bdi-MIR5181e	1	-	63,715,748	63,715,844	0.96	0.83	S	novel	newly identified
5182	Bdi-MIR5182	2	-	51,090,561	51,090,740	0.99	0.56	H	annotated	annotated ³
5185	Bdi-MIR5185l	1	-	50,986,585	50,986,683	0.98	0.88	S	novel	newly identified
5199	Bdi-MIR5199	1	-	42,791,360	42,791,615	0.96	0.56	H	annotated	annotated ²
5200	Bdi-MIR5200a	1	+	47,454,228	47,454,322	0.99	0.95	S	annotated	newly identified
	Bdi-MIR5200b	1	+	47,483,420	47,483,526	1	0.95	S	annotated	annotated ²
5201	Bdi-MIR5201	2	-	42,461,398	45,461,540	0.99	0.62	H	annotated	annotated ²
5281	Bdi-MIR5281a	3	+	11,656,552	11,656,636	1	0.72	S	conserved	newly identified
	Bdi-MIR5281b	3	-	48,737,185	48,737,430	0.92	0.87	S	conserved	newly identified
7731	Bdi-NIR7731	4	+	4,382,748	4,382,918	1	0.95	S	novel	newly identified
7738	Bdi-MIR7738	3	-	47,406,348	47,406,440	0.99	0.9	S	novel	newly identified
7754	Bdi-MIR7754	3	-	22,735,435	22,735,530	1	0.92	S	novel	newly identified
7782	Bdi-MIR7782	3	+	30,460,948	30,461,090	1	0.92	S	conserved	newly identified
9480	Bdi-MIR9480a	4	-	31,011,548	31,011,617	0.98	0.93	S	novel	newly identified
	Bdi-MIR9480b	5	-	22,720,969	22,721,075	1	0.95	S	novel	newly identified
9481	Bdi-MIR9481a	4	-	4,930,203	4,930,325	0.94	0.85	S	novel	newly identified
	Bdi-MIR9481b	4	-	4,929,512	4,929,646	0.94	0.74	S	novel	newly identified
9482	Bdi-MIR9482	4	-	18,009,072	18,009,224	1	0.86	S	novel	newly identified
9483	Bdi-MIR9483a	3	-	2,804,863	2,805,036	1	0.79	S	novel	newly identified
	Bdi-MIR9483b	3	-	2,804,995	2,805,256	1	0.94	S	novel	newly identified
9484	Bdi-MIR9484	2	-	43,034,395	43,034,529	0.94	0.89	S	novel	newly identified
9485	Bdi-MIR9485	2	+	9,203,374	9,203,540	1	0.78	S	novel	newly identified
9486	Bdi-MIR9486a	4	-	7,498,369	7,498,481	0.97	0.71	S	novel	newly identified
	Bdi-MIR9486b	3	-	10,710,427	10,710,554	0.98	0.75	S	novel	newly identified
9487	Bdi-MIR9487	2	+	25,442,100	25,442,286	1	0.85	S	novel	newly identified
9488	Bdi-MIR9488	1	-	50,046,751	50,046,943	1	0.9	S	novel	newly identified
9489	Bdi-MIR9489	2	-	49,503,475	49,503,595	1	0.9	S	novel	newly identified

9490	Bdi-MIR9490	3	-	18,715,092	18,715,183	0.93	0.7	S	novel	newly identified
9491	Bdi-MIR9491	1	+	14,711,883	14,711,980	0.99	0.73	S	novel	newly identified
9492	Bdi- MIR9492	1	-	25,584,132	25,584,222	1	0.8	S	novel	newly identified
9493	Bdi- MIR9493	4	-	36,753,406	36,753,517	0.96	0.75	S	novel	newly identified
9494	Bdi- MIR9494	1	+	2,643,359	2,643,510	0.99	0.79	S	novel	newly identified
9495	Bdi- MIR9495	3	-	7,679,238	7,679,324	1	0.91	S	novel	newly identified
9496	Bdi- MIR9496	3	-	1,747,940	1,748,017	0.96	0.92	S	novel	newly identified
9497	Bdi- MIR9497	2	-	49,315,484	49,315,725	0.97	0.71	S	novel	newly identified
9498	Bdi- MIR9498	1	+	38,422,189	38,422,246	1	0.78	S	novel	newly identified
9499	Bdi- MIR9499	4	-	17,265,172	17,265,253	1	0.73	S	novel	newly identified

¹Planta 230:659-669(2009)

²BMC Genomics 10:449(2009)

³Genomics 97:282-293(2011)

⁴BMC Genomics 12:129(2011)

H - Homology pipeline

M - Manual identification

S - stringent pipeline

Table S2. Conserved and Non-conserved Annotated miRNAs.

miRNA gene families were grouped based on the sequence similarity. The sequences of miRNA family members were aligned, and nucleotides that differ are shown in red. Abundance is from sum of TP2M values from all the libraries.

Family	Mature miRNA	Sequence	Length	Abundance
156/529	Bdi-miR156b-i	UGACAGAAGAGAGUGAGCAC	20	1,060,915
	Bdi-miR156j	UGACAGAAGAGAGAGAGCAC	20	752
	Bdi-miR529	---AGAAGAGAGAGAGUACAGCCU	21	888
159/319	Bdi-miR159b	UUUGGAUUGAAGGGAGCUCUG	21	146,343
	Bdi-miR159c	UUUGGUUGAAGGGGCGCUCUG	21	35
	Bdi-miR319a	--UGGACUGAAGGGAGCUCUCCUC	21	790
	Bdi-miR319b	-UUGGACUGAAGGGUGUCUCCU	21	16,051
160	Bdi-miR160a-d	UGCCUGGCUCCUGUAUGCCA	21	3,130
	Bdi-miR160e	UGCCUGGCUCCUGAUGCCA	21	16,193
	Bdi-miR160f	UGCCUGGCUCCUGUAUGCC	20	85
162	Bdi-miR162	UCGAUAAACCUCUGCAUCCGG	21	1
164	Bdi-miR164abe	UGGAGAAGCAGGGCACGUGCA	21	7,368
	Bdi-miR164c	UGGAGAAGCAGGGCACGUGCU	21	358
	Bdi-miR164c.2	UGCUGGAGAAGCAGGGCACGU	21	949
166	Bdi-miR166a-ei	--UCGGACCAGGCUUCAUCCCC	21	70,179
	Bdi-miR166f	UCUCGGACCAGGCUUCAUCC	21	25,400
	Bdi-miR166h	--UCGGACCAGGCUCAAUCCCU	21	6,040
	Bdi-miR166j	--UCGGACCAGGCUUCAUCCCU	21	4,317
	Bdi-miR166g	UGUGGUGAUCUCGGACCAGGC	21	2,087
167	Bdi-miR167abf	UGAAGCUGCCAGCAUGAUCUA	21	19,018
	Bdi-miR167cdeg	UGAAGCUGCCAGCAUGAUCUGA	22	183,788
168	Bdi-miR168	UCGCUUGGUGCAGAUCCGGAC	21	2,961,266
169	Bdi-miR169a	CAGCCAAGGAUGACUUGCCGA	21	17,292
	Bdi-miR169bn	UAGCCAAGGAUGACUUGCCG	20	8,917
	Bdi-miR169c	CAGCCAAGGAUGACUUGCCGG	21	12,866
	Bdi-miR169d	UAGCCAAGAAUGACUUGCCUA	21	701
	Bdi-miR169e	UAGCCAAGGAUGACUUGCCUG	21	3,599
	Bdi-miR169g-3p	UAGCCAAGGAUGGCUUGCCUA	21	12
	Bdi-miR169hm	UAGCCAAGGAUGACUUGCCUA	21	2,366
	Bdi-miR169k-5p	UAGCCAAGGAUGAUUUGCCUGUA	23	975
	Bdi-miR169l	UAGCCAAGGAUGAAUUGCCGG	21	8
	Bdi-miR169k-3p	UGGGCAAGUCAGCCUGGCUACC	22	1,165
171	Bdi-miR171b-e	UGAUUGAGCCGUGCCAAUAUC	21	24,242
	Bdi-miR171f	---UGAGCCGAACCAUAUCACCC	21	5
	Bdi-miR171f-5p	CAUGGUAUUGUUUCGGCUCAUG	22	117
172	Bdi-miR172a	AGAAUCUUGAUGAUGCUGCAU	21	139,702
	Bdi-miR172b	GGAAUCUUGAUGAUGCUGCAU	21	2,082
390	Bdi-miR390a	AAGCUCAGGAGGGAUAGCGCC	21	1,415
393	Bdi-miR393ab	UCCAAAGGGAUCGCAUUGAUC	21	1,711

	Bdi-miR393b-3p	UCAGUGCAAUCCCUUGGAAU	21	4,884
394	Bdi-miR394	UUGGCAUUCUGUCCACCUCC	20	2,330
395	Bdi-miR395a-ce-hj-oq	UGAAGUGUUUGGGGAACUC	20	1,355
	Bdi-miR395d	--AAGUGUUUGGGGAACUCUAGG	21	172
	Bdi-miR395p	UGAAGUGUUUGGAGGAACUC	20	53
396	Bdi-miR396ab	-UCCACAGGCUUUCUUGAACUG	21	82,150
	Bdi-miR396cd	UUCACAG-CUUUCUUGAACUG	21	418
	Bdi-miR396e	UUCACAG-CUUUCUUGAACUU	21	3,142
397	Bdi-miR397ab	AUUGAGUGCAGCGUUGAUGAA	21	30,860
398	Bdi-miR398a	UGUGUUCUCAGGUCGCCUCUG	21	69
	Bdi-miR398b	UGUGUUCUCAGGUCACCCUU	21	3
399	Bdi-miR399bc	UGCCAAAGGAGAAUUGCCUCG	21	13
	Bdi-miR399d	UGCCAAAGGAGAUUUGCCCGG	21	152
408	Bdi-miR408	CUGCACUGCCUCUCCUUGGC	21	499
	Bdi-miR408-5p	ACAGGGGAUGGAGCAGAGCAUG	21	544
444	Bdi-miR444ab	UGCAGUUGCUGCCUCAAGCUU	21	2,623
	Bdi-miR444cd	UGCAGUUGUUGUCUCAAGCUU	21	635
	Bdi-miR444cd.2	-----UGUUGUCUCAAGCUUGCUGCC	21	1,904
	Bdi-miR444b.3	UUGUGGCUUUCUUGCAAGUUG	21	1,829
528	Bdi-miR528	UGGAAGGGGAUGCAGAGGAG	21	67,688
530	Bdi-miR530ab	UGCAUUUGCACCUCACCUAC	21	4
	Bdi-miR530b-3p	AGGUGCAGUGGCAGAUGCAGC	21	62
531	Bdi-miR531	GAUGCUCGCCGGAGCAGCGUGCUG	24	1,334
827	Bdi-miR827	UUAGAUGACCAUCAGCAAACA	21	587
845	Bdi-miR845	UGCUCUGAUACCAAUUGUUGG	21	594
1432	Bdi-miR1432	UUCAGGAGAGAUGACACCGACA	22	6,157
2118	Bdi-miR2118a	UUUCCGAUGCCUCCCAUCCUA	22	4
	Bdi-miR2118b	UUCCUGAUGCCUCCCAUCCUA	22	8
2275	Bdi-miR2275a	UUUGGUUUCCUCAAUGUCUCA	22	110
	Bdi-miR2275b	UUCAGUUUCUUCUAAUAUCUCA	22	12
	Bdi-miR2275c-3p	UUUGGUUUCCUCAAUAUCUCA	22	26
	Bdi-miR2275b-5p	ACUAGUCCGUUGCAUUUUGC	20	42
	Bdi-miR2275c-5p	AGAUUUGGAUGGAACCAAUC	21	39
5163	Bdi-miR5163a	UUAGGUUUUCAGGUUAGGUG	21	7,423
	Bdi-miR5163b-3p	UAGAUUUUCAGGUUGUGGA	22	36,348
5169	Bdi-miR5169ab	UUUGACCAAGUUUGUAGAACA	21	292
5171	Bdi-miR5171b	ACUUAUAUUGGACGGAAGAA	21	2
5173	Bdi-miR5173	UCUCGUUAUUGCGGAUGUACC	21	257
5174	Bdi-miR5174bdf	CCUCCGUUUCUAUAAGGUUGG	21	367
5176	Bdi-miR5176	UGUGAUGAUGUGGCAUAGAAU	21	1,441
5178	Bdi-miR5178	UCUGACCGGUGGCGCUGAGCG	21	153
5179	Bdi-miR5179	UUUUGCUCAAGACCGCAAC	21	1,179
5181	Bdi-miR5181c	ACUUCUUUUGGAUUGUAGGGA	21	136
	Bdi-miR5181e	CGACACUUACUGUGGCUCGGA	21	277
5182	Bdi-miR5182	UGAUGAUCUUGGAACACGUGC	21	453
5185	Bdi-miR51851-3p.2	UGGAGAUUGACUUAGAAGCGG	21	360

5199	Bdi-miR5199	UGUUCAUACGGUUGAUAGCAC	21	84
5200	Bdi-miR5200ab	UGUAGAUACUCCUAAGGCUU	21	901
5201	Bdi-miR5201	AGGGCGAGGCAAUAUCAAA	21	51
5281	Bdi-miR5281ab	UCUUAUAAAUAAGGAACGGAGG	21	50
7731	Bdi-miR7731	AACAAGGGAUGCACAUACUUUGAG	24	836
7738	Bdi-miR7738-3p	GUGCUUGACAGACGACUCUGG	21	446
7754	Bdi-miR7754-3p	UUCUCUCGGCUAAGGAACUGC	21	392
7782	Bdi-miR7782	ACCUGCUCUGAUACCAUGUUGUGA	24	64,824
9480	Bdi-miR9480ab	UAUGUGAGGGUGGUAACUGAA	21	1,645
9481	Bdi-miR9481a	UCAGUCGGAUUUCACCUUCGAA	24	384
	Bdi-miR9481b	UCAGUCGGAUUUCACCUUC	21	73
9482	Bdi-miR9482	CCUUUGGGGAAGAAGGAAAC	21	339
9483	Bdi-miR9483ab	UUGAACUGUUUCCUCUGAAGUCC	24	317
9484	Bdi- miR9484	UAGUGCAGGGAGAAGUCGGUC	21	259
9485	Bdi- miR9485	UUAUGACGUGUAGGAGUUGCA	21	260
9486	Bdi-miR9486a.1	AUGCUUUAAGGGAUUAGAGGUUC	24	254
	Bdi-miR9486a.2	UCUAAUGGCUGAAAUGGGAAG	21	183
	Bdi-miR9486b	UAAGUGAUUAGAGGUUCCAGU	21	121
9487	Bdi-miR9487	CCUUGUUCGAUUGCAAGAUGA	21	174
9488	Bdi- miR9488	UGAGGGCUAGGCUUUUAUGUAA	22	161
9489	Bdi- miR9489	UCAGCUCACGGACUUGGUGA	21	144
9490	Bdi- miR9490	AGGCCACACCCUAAUGGUCGUGCG	24	111
9491	Bdi- miR9491	UGGUAUGUUACCUUGAUCAG	21	69
9492	Bdi- miR9492	UAUCUACUCUGUCAUGGUAUC	21	60
9493	Bdi- miR9493	AAGAAUUAUGAAACGAAGGGAGUA	24	60
9494	Bdi- miR9494	UUCAUCACCUUCGUCUCCGUC	21	56
9495	Bdi- miR9495	UGAAAAAUGCCUCUGGACGUG	21	55
9496	Bdi- miR9496	CUGGUUGGGCUUAGAUGGGUCC	22	44
9497	Bdi- miR9497	UUUCUGAAUACAUGGUGUAUC	21	35
9498	Bdi- miR9498	GACCGUCAAGUGGUUGUUGAG	21	23
9499	Bdi- miR9499	CCCUCGUCGACGCGGCAGCUC	21	86

Table S3. miRNA Targets with PARE Sequences at the Predicted Cleavage Sites.

^aThe sum of abundance of the PARE sequence in all four libraries. ^bNP indicates that the score was over the cutoff for the program, i.e. not predicted. ^cA= Abundance, T= Rank, P=Peak %.

Family	miRNA(s)	cDNA	Cleavage site (nt)	Max Level	Sum of Abundance (TP10M) ^a	Score ^b			Criteria passed ^c
						CleaveLand	CleaveLandM	psRNATarget	
156/529	Bdi-miR156b-i	Bradi3g40030.1	783	4	77	1	1	1	A,T,P
	Bdi-miR156b-i	Bradi4g18900.1	429	4	17	1	1	1	A,T,P
	Bdi-miR156b-i	Bradi4g33770.1	825	4	77	1	1	1	A,T,P
	Bdi-miR156b-i	Bradi4g34667.1	864	4	93	1	1	1	A,T,P
	Bdi-miR156b-i	Bradi2g59110.1	840	3	78	1	1	1	A,T
	Bdi-miR156b-i	Bradi3g41250.1	960	3	51	1	1	1	A,T
	Bdi-miR156b-i	Bradi3g03510.1	1176	3	27	2	2	2	A,T
	Bdi-miR156b-i	Bradi3g05510.1	747	3	80	2	2	2	A,T
	Bdi-miR156j	Bradi3g40030.1	783	4	77	0	0	0	A,T,P
	Bdi-miR156j	Bradi4g18900.1	429	4	17	0	0	0	A,T,P
	Bdi-miR156j	Bradi4g33770.1	825	4	77	0	0	0	A,T,P
	Bdi-miR156j	Bradi4g34667.1	864	4	93	0	0	0	A,T,P
	Bdi-miR156j	Bradi2g59110.1	840	3	78	0	0	0	A,T
	Bdi-miR156j	Bradi3g41250.1	960	3	51	0	0	0	A,T
	Bdi-miR156j	Bradi3g03510.1	1176	3	27	1	1	1	A,T
	Bdi-miR156j	Bradi3g05510.1	747	3	80	1	1	1	A,T
	Bdi-miR529	Bradi4g33770.1	821	4	76	2.5	2.5	2.5	A,T,P
	Bdi-miR529	Bradi3g40030.1	779	4	76	2.5	2.5	2.5	A,T,P
Bdi-miR529	Bradi2g59110.1	836	1	2	3.5	3.5	3.5		
Bdi-miR529	Bradi3g41250.1	956	1	3	NP	NP	2		
Bdi-miR529	Bradi4g34667.1	860	1	1	NP	NP	3		
159/319	Bdi-miR159b	Bradi2g53010.1	970	3	37	3.5	2	3	A,T
	Bdi-miR159b	Bradi1g15580.1	550	3	1	4	2	NP	T,P

	Bdi-miR159b	Bradi1g36540.1	736	1	1	3.5	1.5	3	
	Bdi-miR159b	Bradi1g10140.2	144	1	5	7	4	NP	
	Bdi-miR159c	Bradi2g53010.1	970	3	37	NP	NP	5	A,T
	Bdi-miR159c	Bradi3g37620.1	1864	1	2	6.5	4	NP	
	Bdi-miR159c	Bradi1g36540.1	736	1	1	NP	NP	5	
	Bdi-miR319b	Bradi4g01547.1	719	4	53	4	3	3	A,T,P
	Bdi-miR319b	Bradi1g58450.1	1097	4	203	NP	NP	3.5	A,T,P
	Bdi-miR319b	Bradi1g06460.1	953	1	2	NP	NP	3.5	
	Bdi-miR319b	Bradi2g45870.1	1634	1	3	NP	NP	4	
160	Bdi-miR160a-d	Bradi3g28950.1	1334	4	870	1	1	1	A,T,P
	Bdi-miR160a-d	Bradi5g27400.2	1154	4	150	0.5	0.5	NP	A,T,P
	Bdi-miR160a-d	Bradi1g33160.1	1403	4	870	1	1	NP	A,T,P
	Bdi-miR160a-d	Bradi3g49320.1	1370	4	1764	1	1	NP	A,T,P
	Bdi-miR160a-d	Bradi5g15904.1	1418	4	504	1	1	NP	A,T,P
	Bdi-miR160a-d	Bradi1g36430.1	701	1	5	7	NP	NP	
	Bdi-miR160a-d	Bradi4g25620.1	1906	1	7	7	NP	NP	
	Bdi-miR160e	Bradi3g28950.1	1334	4	870	2	2	2	A,T,P
	Bdi-miR160e	Bradi5g27400.2	1154	4	150	1	1	NP	A,T,P
	Bdi-miR160e	Bradi1g33160.1	1403	4	870	2	2	NP	A,T,P
	Bdi-miR160e	Bradi3g49320.1	1370	4	1764	2	2	NP	A,T,P
	Bdi-miR160e	Bradi5g15904.1	1418	4	504	2	2	NP	A,T,P
	Bdi-miR160e	Bradi2g24290.1	1304	1	11	6	NP	NP	
	Bdi-miR160e	Bradi3g51077.1	2828	1	2	NP	NP	4.5	
	Bdi-miR160e	Bradi5g18540.1	2954	1	6	NP	NP	4.5	
	Bdi-miR160f	Bradi3g28950.1	1334	4	870	0	0	0	A,T,P
	Bdi-miR160f	Bradi1g33160.1	1403	4	870	0	0	NP	A,T,P
	Bdi-miR160f	Bradi3g49320.1	1370	4	1764	0	0	NP	A,T,P
	Bdi-miR160f	Bradi5g15904.1	1418	4	504	0	0	NP	A,T,P
	Bdi-miR160f	Bradi5g27400.2	1154	4	150	0.5	0.5	NP	A,T,P
	Bdi-miR160f	Bradi4g25620.1	1906	1	7	6	4	NP	

	Bdi-miR160f	Bradi1g36430.1	701	1	5	7	NP	NP	
162	Bdi-miR162	Bradi4g20620.1	893	1	3	NP	NP	3	
	Bdi-miR162	Bradi5g09500.1	576	1	4	NP	NP	5	
164	Bdi-miR164abe	Bradi4g02060.1	670	4	106	2	2	2	A,T,P
	Bdi-miR164abe	Bradi4g42720.1	59	4	37	3	2	3	A,T,P
	Bdi-miR164abe	Bradi5g12407.1	628	4	83	4	3	3	A,T,P
	Bdi-miR164abe	Bradi3g46900.1	697	4	59	4	3	NP	A,T,P
	Bdi-miR164abe	Bradi4g28260.1	431	3	89	4.5	3.5	NP	A,T
	Bdi-miR164abe	Bradi1g32660.1	652	3	16	2	2	2	T,P
	Bdi-miR164abe	Bradi1g41710.1	316	3	5	2	2	2	T,P
	Bdi-miR164abe	Bradi1g07520.1	536	2	17	5.5	2.5	4.5	A
	Bdi-miR164abe	Bradi1g24360.1	550	1	1	4.5	2.5	3.5	
	Bdi-miR164abe	Bradi3g17287.1	643	1	2	4.5	3	NP	
	Bdi-miR164abe	Bradi3g19860.1	940	1	2	6	4	NP	
	Bdi-miR164abe	Bradi2g43950.1	1837	1	2	7	NP	NP	
	Bdi-miR164c	Bradi4g02060.1	670	4	106	1	1	1	A,T,P
	Bdi-miR164c	Bradi5g12407.1	628	4	83	4	3	3	A,T,P
	Bdi-miR164c	Bradi3g46900.1	697	4	59	4	3	NP	A,T,P
	Bdi-miR164c	Bradi4g28260.1	431	3	89	5	NP	NP	A,T
	Bdi-miR164c	Bradi1g32660.1	652	3	16	1	1	1	T,P
	Bdi-miR164c	Bradi1g41710.1	316	3	5	1	1	1	T,P
	Bdi-miR164c	Bradi1g68830.1	1524	1	3	5.5	2.5	4	
	Bdi-miR164c	Bradi1g24360.1	550	1	1	5.5	3.5	4.5	
	Bdi-miR164c	Bradi3g17287.1	643	1	2	3.5	2	NP	
	Bdi-miR164c	Bradi2g43950.1	1837	1	2	6	3.5	NP	
	Bdi-miR164c	Bradi3g19860.1	940	1	2	6	4	NP	
	Bdi-miR164c.2	Bradi4g28260.1	434	3	17	6	3	NP	A,T
	Bdi-miR164c.2	Bradi3g53520.1	105	2	19	NP	3.5	NP	A
	Bdi-miR164c.2	Bradi4g02060.1	673	1	5	2	1	2	
	Bdi-miR164c.2	Bradi3g12627.1	3145	1	1	5	3	3	
	Bdi-miR164c.2	Bradi3g46900.1	700	1	2	3.5	2	NP	

	Bdi-miR164c.2	Bradi1g23450.1	1186	1	2	5.5	3	NP	
	Bdi-miR164c.2	Bradi4g33550.1	1306	1	1	5.5	3.5	NP	
	Bdi-miR164c.2	Bradi1g45710.1	244	1	10	5.5	3.5	NP	
	Bdi-miR164c.2	Bradi2g26240.1	307	1	1	6	4	NP	
166	Bdi-miR166a-ei	Bradi2g06210.1	544	4	133	3	2.5	3	A,T,P
	Bdi-miR166a-ei	Bradi3g28970.1	586	3	142	3	2.5	3	A,T
	Bdi-miR166a-ei	Bradi1g13910.1	631	3	133	3	2.5	3	A,T
	Bdi-miR166a-ei	Bradi4g01887.1	586	3	133	3	2.5	3	A,T
	Bdi-miR166a-ei	Bradi1g47670.1	2117	2	9	NP	NP	1.5	T
	Bdi-miR166a-ei	Bradi4g38980.1	1353	1	4	NP	NP	4.5	
	Bdi-miR166a-ei	Bradi5g18830.1	203	1	2	NP	NP	3	
	Bdi-miR166f	Bradi1g13910.1	633	2	14	2.5	2	3.5	A
	Bdi-miR166f	Bradi2g06210.1	546	2	14	2.5	2	3.5	A
	Bdi-miR166f	Bradi4g01887.1	588	2	14	2.5	2	3.5	A
	Bdi-miR166f	Bradi3g28970.1	588	1	4	2.5	2	3.5	
	bdi-miR166g	Bradi1g40990.1	713	1	1	NP	NP	4	
	bdi-miR166g	Bradi3g42400.1	401	1	3	7	4	NP	
	Bdi-miR166h	Bradi2g33900.1	499	4	31	NP	NP	5	A,T,P
	Bdi-miR166h	Bradi2g06210.1	544	4	133	NP	NP	4	A,T,P
	Bdi-miR166h	Bradi1g13910.1	631	3	133	NP	NP	4	A,T
	Bdi-miR166h	Bradi3g28970.1	586	3	142	NP	NP	4	A,T
	Bdi-miR166h	Bradi4g01887.1	586	3	133	NP	NP	4	A,T
	Bdi-miR166h	Bradi1g47670.1	2117	2	9	NP	NP	3	T
	Bdi-miR166h	Bradi2g51350.1	550	1	2	NP	NP	4	
	Bdi-miR166h	Bradi2g05140.1	484	1	3	NP	NP	5	
	Bdi-miR166h	Bradi4g15750.1	914	1	1	NP	NP	5	
	Bdi-miR166j	Bradi2g06210.1	544	4	133	3	2.5	3	A,T,P
	Bdi-miR166j	Bradi1g13910.1	631	3	133	3	2.5	3	A,T
	Bdi-miR166j	Bradi3g28970.1	586	3	142	3	2.5	3	A,T
	Bdi-miR166j	Bradi4g01887.1	586	3	133	3	2.5	3	A,T

	Bdi-miR166j	Bradi2g52350.1	682	3	13	NP	NP	5	A,T
	Bdi-miR166j	Bradi1g47670.1	2117	2	9	NP	NP	3.5	T
	Bdi-miR166j	Bradi3g51577.1	646	1	2	NP	NP	4.5	
	Bdi-miR166j	Bradi5g18830.1	203	1	2	NP	NP	5	
167	Bdi-miR167abf	Bradi4g01730.1	2564	4	215	5	3	4.5	A,T,P
	Bdi-miR167abf	Bradi1g32547.1	2468	4	215	5	3	4.5	A,T,P
	Bdi-miR167abf	Bradi3g04920.1	2510	4	249	5	3	4.5	A,T,P
	Bdi-miR167abf	Bradi5g25767.1	2339	4	215	4	2	NP	A,T,P
	Bdi-miR167abf	Bradi1g03480.1	867	2	8	6.5	NP	NP	T
	Bdi-miR167abf	Bradi3g06640.1	1150	1	1	7	NP	NP	
	Bdi-miR167cdeg	Bradi4g01730.1	2564	4	215	5	3	4.5	A,T,P
	Bdi-miR167cdeg	Bradi3g04920.1	2510	4	249	5	3	4.5	A,T,P
	Bdi-miR167cdeg	Bradi5g25767.1	2339	4	215	5.5	3.5	NP	A,T,P
	Bdi-miR167cdeg	Bradi1g32547.1	2468	4	215	NP	NP	4.5	A,T,P
	Bdi-miR167cdeg	Bradi1g03480.1	867	2	8	7	NP	NP	T
	Bdi-miR167cdeg	Bradi1g55550.1	1459	1	1	6	3.5	4.5	
168	Bdi-miR168	Bradi2g45920.1	328	4	16	NP	NP	4.5	A,T,P
	Bdi-miR168	Bradi3g51077.1	343	1	1	5	3	4.5	
	Bdi-miR168	Bradi3g05060.1	1104	1	1	6	4	NP	
	Bdi-miR168	Bradi1g52020.1	498	1	11	NP	NP	4	
169	Bdi-miR169a	Bradi2g58570.1	244	3	2	5.5	3.5	3.5	T,P
	Bdi-miR169a	Bradi1g20360.1	311	1	10	NP	NP	3.5	
	Bdi-miR169a	Bradi1g14940.1	1895	1	1	NP	NP	4	
	Bdi-miR169bn	Bradi2g58570.1	244	3	2	NP	NP	3	T,P
	Bdi-miR169bn	Bradi2g37630.1	1673	1	3	6	4	NP	
	Bdi-miR169bn	Bradi1g14940.1	1895	1	1	NP	NP	3	
	Bdi-miR169bn	Bradi1g20360.1	311	1	10	NP	NP	4.5	
	Bdi-miR169c	Bradi2g58570.1	244	3	2	5.5	3.5	3.5	T,P
	Bdi-miR169c	Bradi2g24160.2	124	1	1	7	4	NP	
	Bdi-miR169c	Bradi4g28260.1	70	1	1	7	NP	NP	
	Bdi-miR169c	Bradi1g14940.1	1895	1	1	NP	NP	4	

	Bdi-miR169c	Bradi1g20360.1	311	1	10	NP	NP	4.5	
	Bdi-miR169d	Bradi1g20360.1	311	1	10	NP	NP	5	
	Bdi-miR169e	Bradi2g58570.1	244	3	2	NP	NP	4.5	T,P
	Bdi-miR169e	Bradi2g59920.1	682	1	11	NP	NP	5	
	Bdi-miR169e	Bradi1g20360.1	311	1	10	NP	NP	4.5	
	Bdi-miR169e	Bradi1g14940.1	1895	1	1	NP	NP	5	
	Bdi-miR169g-3p	Bradi1g25460.1	1695	1	1	NP	NP	5	
	Bdi-miR169g-5p	Bradi2g35187.1	1158	1	1	5	3.5	NP	
	Bdi-miR169g-5p	Bradi1g47090.1	1372	1	1	7	NP	NP	
	Bdi-miR169hm	Bradi2g58570.1	244	3	2	NP	NP	4.5	T,P
	Bdi-miR169hm	Bradi1g20360.1	311	1	10	NP	NP	4	
	Bdi-miR169hm	Bradi1g14940.1	1895	1	1	NP	NP	5	
	Bdi-miR169l	Bradi4g18870.1	187	1	1	7	3.5	NP	
	Bdi-miR169l	Bradi2g35587.1	3951	1	9	NP	NP	4.5	
	Bdi-miR169l	Bradi1g14940.1	1895	1	1	NP	NP	4	
171	Bdi-miR171b-e	Bradi1g52240.1	584	4	309	1	0.5	0.5	A,T,P
	Bdi-miR171b-e	Bradi3g50930.1	1163	4	277	1	0.5	NP	A,T,P
	Bdi-miR171b-e	Bradi1g78230.1	833	4	802	1	1	NP	A,T,P
	Bdi-miR171b-e	Bradi3g32890.1	899	1	2	2	1	NP	
	Bdi-miR171b-e	Bradi1g02440.1	2241	1	8	5.5	3.5	NP	
	Bdi-miR171b-e	Bradi1g44177.1	10014	1	4	7	4	NP	
	Bdi-miR171b-e	Bradi1g10780.1	257	1	5	NP	NP	4.5	
	Bdi-miR171f	Bradi1g67270.1	1256	1	1	6	4	5	
	Bdi-miR171f	Bradi1g61350.1	528	1	1	6	NP	4.5	
	Bdi-miR171f-5p	Bradi3g30170.1	478	1	1	NP	NP	5	
172	Bdi-miR172a	Bradi1g03880.1	1267	4	187	2	1.5	1.5	A,T,P
	Bdi-miR172a	Bradi1g30337.1	1048	4	28	4	2.5	3.5	A,T,P
	Bdi-miR172a	Bradi5g24100.1	1318	4	68	5	3	4.5	A,T,P
	Bdi-miR172a	Bradi1g53650.1	1174	4	187	NP	NP	1.5	A,T,P
	Bdi-miR172a	Bradi2g37800.1	1372	4	84	NP	NP	1.5	A,T,P

	Bdi-miR172a	Bradi1g07140.1	1533	1	1	NP	NP	5	
	Bdi-miR172b	Bradi1g53650.1	1174	4	187	2.5	1.5	2	A,T,P
	Bdi-miR172b	Bradi1g03880.1	1267	4	187	2.5	1.5	2	A,T,P
	Bdi-miR172b	Bradi2g37800.1	1372	4	84	2.5	1.5	2	A,T,P
	Bdi-miR172b	Bradi1g30337.1	1048	4	28	3	2.5	2.5	A,T,P
	Bdi-miR172b	Bradi5g24100.1	1318	4	68	4	3	3.5	A,T,P
390	Bdi-miR390a	Bradi4g27480.3	489	1	3	NP	NP	4.5	
	Bdi-miR390a	Bradi1g32310.1	327	1	1	NP	NP	5	
393	Bdi-miR393ab	Bradi5g08680.1	1513	4	55	1	1.5	3	A,T,P
	Bdi-miR393ab	Bradi2g35720.1	1561	3	69	1	1.5	3	A,T
	Bdi-miR393ab	Bradi3g09350.1	1397	1	1	NP	NP	5	
	Bdi-miR393b-3p	Bradi4g41070.1	282	1	1	NP	NP	5	
394	Bdi-miR394	Bradi2g59200.1	1099	4	1200	0	0	0	A,T,P
	Bdi-miR394	Bradi3g41490.1	1652	1	5	6	NP	NP	
	Bdi-miR394	Bradi4g14097.1	758	1	9	NP	NP	3	
	Bdi-miR394	Bradi4g16560.1	673	1	1	NP	NP	4	
395	Bdi-miR395a-ce-hj-oq	Bradi1g09030.1	338	3	549	2	1	1	A,T
	Bdi-miR395a-ce-hj-oq	Bradi1g24110.1	127	1	3	NP	NP	3	
	Bdi-miR395a-ce-hj-oq	Bradi1g52550.1	305	1	3	NP	NP	3.5	
	Bdi-miR395a-ce-hj-oq	Bradi3g20730.1	761	1	2	NP	NP	4.5	
	bdi-miR395d	Bradi3g30590.1	619	1	1	NP	NP	4	
	Bdi-miR395p	Bradi1g09030.1	338	3	549	1	0.5	0.5	A,T
	Bdi-miR395p	Bradi5g12740.1	286	1	2	6.5	4	NP	
	Bdi-miR395p	Bradi5g00640.1	508	1	3	7	NP	NP	
	Bdi-miR395p	Bradi1g24110.1	127	1	3	NP	NP	2.5	
	Bdi-miR395p	Bradi1g52550.1	305	1	3	NP	NP	3	
	Bdi-miR395p	Bradi3g20730.1	761	1	2	NP	NP	4	
396	Bdi-miR396ab	Bradi3g52547.1	494	4	3853	1	1	1	A,T,P
	Bdi-miR396ab	Bradi3g57267.1	395	4	159	1	1	1	A,T,P
	Bdi-miR396ab	Bradi5g20607.1	497	4	3853	1	1	1	A,T,P
	Bdi-miR396ab	Bradi1g46427.1	392	4	129	1	1	1	A,T,P

	Bdi-miR396ab	Bradi1g50597.1	392	4	2171	1	1	1	A,T,P
	Bdi-miR396ab	Bradi3g51685.1	509	4	366	1	1	NP	A,T,P
	Bdi-miR396ab	Bradi1g12650.1	551	4	424	NP	NP	2	A,T,P
	Bdi-miR396ab	Bradi4g16450.1	710	4	183	NP	NP	3.5	A,T,P
	Bdi-miR396ab	Bradi1g09900.1	335	3	127	3.5	2.5	3.5	A,T
	Bdi-miR396ab	Bradi2g11230.1	818	3	50	4	4	NP	A,T
	Bdi-miR396ab	Bradi2g45300.1	852	2	4	2	1.5	NP	P
	Bdi-miR396cd	Bradi3g52547.1	494	4	3853	NP	NP	3	A,T,P
	Bdi-miR396cd	Bradi3g57267.1	395	4	159	NP	NP	3	A,T,P
	Bdi-miR396cd	Bradi5g20607.1	497	4	3853	NP	NP	3	A,T,P
	Bdi-miR396cd	Bradi1g46427.1	392	4	129	NP	NP	3	A,T,P
	Bdi-miR396cd	Bradi1g50597.1	392	4	2171	NP	NP	3	A,T,P
	Bdi-miR396cd	Bradi2g45300.1	852	2	4	5	2	NP	P
	Bdi-miR396cd	Bradi1g44460.1	525	1	3	7	3	NP	
	Bdi-miR396cd	Bradi3g12240.1	549	1	1	5	4	NP	
	Bdi-miR396cd	Bradi5g21080.1	1116	1	4	6	NP	NP	
	Bdi-miR396cd	Bradi3g53247.1	660	1	3	6.5	NP	NP	
	Bdi-miR396e	Bradi4g16450.1	710	4	183	NP	NP	3	A,T,P
	Bdi-miR396e	Bradi1g46427.1	392	4	129	NP	NP	3	A,T,P
	Bdi-miR396e	Bradi1g50597.1	392	4	2171	NP	NP	3	A,T,P
	Bdi-miR396e	Bradi2g45300.1	852	2	4	6	3	NP	P
	Bdi-miR396e	Bradi5g21080.1	1116	1	4	5	4	NP	
	Bdi-miR396e	Bradi1g45800.1	759	1	2	NP	4	NP	
	Bdi-miR396e	Bradi3g14490.1	498	1	3	NP	4	NP	
	Bdi-miR396e	Bradi3g12240.1	549	1	1	6	NP	NP	
	Bdi-miR396e	Bradi3g53247.1	660	1	3	7	NP	NP	
	Bdi-miR396e	Bradi4g34360.1	222	1	4	NP	NP	4.5	
397	Bdi-miR397ab	Bradi4g39330.1	690	2	17	5	2.5	NP	A
	Bdi-miR397ab	Bradi2g54690.1	687	1	1	4	2	3	
	Bdi-miR397ab	Bradi3g45460.1	455	1	3	NP	NP	4.5	
398	Bdi-miR398b	Bradi5g23166.1	207	1	3	6.5	4	NP	

399	Bdi-miR399d	Bradi3g22020.1	383	1	1	NP	NP	4.5	
408	Bdi-miR408	Bradi1g11240.1	16	1	1	5	3	NP	
	Bdi-miR408	Bradi3g03720.1	1258	1	1	7	NP	NP	
	Bdi-miR408	Bradi4g16750.1	534	1	3	7	NP	NP	
	Bdi-miR408-5p	Bradi4g09417.1	395	2	31	4	2	3.5	A
	Bdi-miR408-5p	Bradi3g33080.1	1342	1	1	5.5	3.5	NP	
	Bdi-miR408-5p	Bradi3g52150.1	1022	1	1	7	3.5	NP	
444	Bdi-miR444ab	Bradi3g46920.1	293	3	10	4	2	2	A,T
	Bdi-miR444ab	Bradi2g32290.1	797	3	10	NP	NP	2.5	A,T
	Bdi-miR444ab	Bradi2g41210.1	606	3	13	6.5	NP	NP	A,T
	Bdi-miR444ab	Bradi3g16220.1	992	3	9	1.5	1	1	T,P
	Bdi-miR444ab	Bradi3g08820.1	513	1	8	7	NP	NP	
	Bdi-miR444ab	Bradi1g07170.1	333	1	8	NP	NP	4.5	
	Bdi-miR444b.3	Bradi3g57017.1	314	3	5	NP	NP	0	T,P
	Bdi-miR444cd	Bradi3g46920.1	293	3	10	0	0	0	A,T
	Bdi-miR444cd	Bradi2g32290.1	797	3	10	NP	NP	3.5	A,T
	Bdi-miR444cd	Bradi3g16220.1	992	3	9	3.5	2	2	T,P
	Bdi-miR444cd	Bradi1g64130.1	978	1	5	7	3	NP	
	Bdi-miR444cd.2	Bradi1g17050.1	295	1	1	7	NP	NP	
	Bdi-miR444cd.2	Bradi1g64130.1	972	1	7	7	NP	NP	
528	Bdi-miR528	Bradi3g43070.1	92	2	51	6	3.5	NP	A
	Bdi-miR528	Bradi4g28320.1	347	1	2	7	4	NP	
530	Bdi-miR530ab	Bradi3g41260.1	608	1	3	7	NP	NP	
	Bdi-miR530ab	Bradi5g07410.1	164	1	1	7	NP	NP	
	Bdi-miR530b-3p	Bradi4g40800.1	202	2	77	6.5	3.5	NP	A
	Bdi-miR530b-3p	Bradi1g04080.1	828	1	3	NP	NP	3	
845	Bdi-miR845	Bradi5g12660.5	2903	1	2	6.5	3.5	NP	
	Bdi-miR845	Bradi2g15730.1	141	1	5	NP	NP	4.5	
1432	Bdi-miR1432	Bradi1g53830.1	53	1	2	4.5	3.5	4.5	
	Bdi-miR1432	Bradi5g19240.1	851	1	1	4.5	2.5	NP	

	Bdi-miR1432	Bradi2g26930.1	999	1	11	7	NP	NP	
	Bdi-miR1432	Bradi2g12320.1	1062	1	2	NP	NP	5	
	Bdi-miR1432	Bradi4g20890.1	1467	1	1	NP	NP	5	
2118	Bdi-miR2118b	Bradi2g31500.1	553	3	2	6	4	NP	T,P
	Bdi-miR2118b	Bradi5g13180.1	1260	1	2	NP	NP	3.5	
2275	Bdi-miR2275a	Bradi5g24130.1	357	1	2	4.5	2.5	3	
	Bdi-miR2275a	Bradi4g06017.1	615	1	1	4.5	4	NP	
	Bdi-miR2275a	Bradi1g66620.1	1047	1	1	NP	4	NP	
	Bdi-miR2275a	Bradi3g15290.1	801	1	1	6	NP	NP	
	Bdi-miR2275a	Bradi3g43540.1	1122	1	2	NP	NP	4.5	
	Bdi-miR2275a	Bradi2g20200.1	1359	1	1	NP	NP	4	
	Bdi-miR2275b	Bradi2g20200.1	1359	1	1	NP	NP	3.5	
	Bdi-miR2275b-5p	Bradi3g58280.1	325	1	1	NP	NP	5	
	bdi-miR2275c-5p	Bradi1g23350.1	312	1	2			3.5	
	bdi-miR2275c-5p	Bradi3g20460.1	1286	1	8			3.5	
	bdi-miR2275c-3p	Bradi5g24130.1	357	1	2	4	2	2.5	
5163	Bdi-miR5163b-3p	Bradi4g10171.1	1746	2	3	3	1.5	2	T
	Bdi-miR5163b-3p	Bradi4g07430.1	1000	1	2	6.5	NP	NP	
5169	Bdi-miR5169ab	Bradi5g18060.1	220	1	1	NP	NP	4	
5173	Bdi-miR5173	Bradi2g19360.1	313	1	2	7	NP	NP	
	Bdi-miR5173	Bradi3g38045.1	79	1	2	NP	NP	4.5	
	Bdi-miR5173	Bradi3g10530.1	1993	1	1	NP	NP	5	
	Bdi-miR5173	Bradi3g38040.1	79	1	2	NP	NP	5	
5174	Bdi-miR5174bdf	Bradi2g05530.1	1279	1	2	NP	NP	4.5	
5176	Bdi-miR5176	Bradi3g05520.2	1119	1	7	6.5	NP	NP	
5178	bdi-miR5178	Bradi3g05010.1	332	1	3	NP	N	4.5	
5179	Bdi-miR5179	Bradi1g35000.1	371	1	3	1	1	1	
	Bdi-miR5179	Bradi1g68887.1	625	1	6	NP	4	NP	
5181	Bdi-miR5181c	Bradi1g52160.1	964	1	1	7	NP	NP	
	Bdi-miR5181c	Bradi1g09110.1	864	1	2	NP	NP	4	

	Bdi-miR5181c	Bradi1g33800.1	867	1	2	NP	NP	4
	Bdi-miR5181c	Bradi1g61230.2	349	1	1	NP	NP	4.5
	Bdi-miR5181c	Bradi3g14980.1	286	1	10	NP	NP	4.5
5185	Bdi-miR5185l-3p.2	Bradi1g25002.2	5313	1	2	6	NP	NP
5199	bdi-miR5199	Bradi5g21090.1	1959	1	1	NP	N	4.5
5201	bdi-miR5201	Bradi5g19840.1	759	1	3	NP	N	4
7738	Bdi-miR7738-3p	Bradi1g73450.1	452	1	1	NP	NP	4
	Bdi-miR7738-3p	Bradi2g11370.1	262	1	1	NP	NP	4.5
	Bdi-miR7738-3p	Bradi3g17900.1	697	1	1	NP	NP	4.5
7754	Bdi-miR7754-3p	Bradi1g56137.1	539	1	2	NP	NP	4.5
	Bdi-miR7754-3p	Bradi1g58260.1	2021	1	2	NP	NP	4.5
9408	Bdi-miR9408ab	Bradi2g36550.2	1332	1	1	NP	NP	4
9481	Bdi-miR9481a	Bradi3g07980.2	170	1	2	7	NP	NP
	Bdi-miR9481b	Bradi2g55210.1	989	1	2	NP	NP	4.5
9482	Bdi-miR9482	Bradi4g17410.2	1522	1	2	NP	NP	4.5
9484	Bdi-miR9484	Bradi2g25376.1	251	1	1	6	NP	NP
	Bdi-miR9484	Bradi1g29267.1	2555	1	2	NP	NP	4.5
	Bdi-miR9484	Bradi4g44838.1	1224	1	3	NP	NP	4.5
9486	Bdi-miR9486a	Bradi3g48630.1	1438	1	2	NP	NP	5
	Bdi-miR9486b	Bradi3g02487.1	645	1	2	NP	NP	5
	Bdi-miR9486b	Bradi3g42710.1	153	1	3	NP	NP	5
9487	Bdi-miR9487	Bradi2g14310.1	563	1	1	5	2.5	3
	Bdi-miR9487	Bradi2g47850.1	563	1	2	6	3	3.5
	Bdi-miR9487	Bradi4g24740.1	1225	1	2	NP	NP	3.5
	Bdi-miR9487	Bradi2g56320.1	811	1	4	NP	NP	4
9488	Bdi-miR9488	Bradi2g27360.1	34	1	2	7	NP	NP
	Bdi-miR9488	Bradi4g36290.1	774	1	4	NP	NP	4.5
9489	Bdi-miR9489	Bradi1g15190.1	655	1	5	4	2.5	3.5
	Bdi-miR9489	Bradi2g34650.1	196	1	1	6	2.5	NP
	Bdi-miR9489	Bradi2g26240.1	1390	1	1	6	4	NP
	Bdi-miR9489	Bradi2g54680.1	1387	1	1	6.5	4	NP

	Bdi-miR9489	Bradi1g55120.1	13	1	4	6.5	NP	NP
9483	Bdi-miR9493	Bradi4g06340.1	646	1	5	NP	NP	4
9484	Bdi-miR9494	Bradi2g10617.1	782	1	2	2	2	2
	Bdi-miR9494	Bradi3g37950.1	902	1	2	2	2	2
	Bdi-miR9494	Bradi3g03280.1	902	1	1	4	2.5	3
	Bdi-miR9494	Bradi2g56970.1	857	1	1	5	3	NP
	Bdi-miR9494	Bradi3g31850.1	629	1	8	7	3.5	NP
	Bdi-miR9494	Bradi5g23325.1	186	1	3	7	3.5	NP
	Bdi-miR9494	Bradi2g02730.1	324	1	1	NP	4	NP
	Bdi-miR9494	Bradi5g15540.2	503	1	5	7	NP	NP
	Bdi-miR9494	Bradi3g38410.1	788	1	1	NP	NP	2.5
9486	Bdi-miR9496	Bradi3g49100.1	1232	1	1	6	NP	NP
	Bdi-miR9496	Bradi1g28310.3	1179	1	4	7	NP	NP
	Bdi-miR9496	Bradi3g52400.1	501	1	2	NP	NP	4
9487	Bdi-miR9497	Bradi5g08235.1	2483	1	1	7	3.5	NP
9498	Bdi-miR9498	Bradi2g11220.1	373	1	4	6	3	NP
	Bdi-miR9498	Bradi2g21120.1	411	1	8	5.5	NP	NP
	Bdi-miR9498	Bradi4g03787.1	1773	1	1	NP	NP	4.5
9499	Bdi-miR9499	Bradi5g13600.1	110	1	2	5	3	NP
	Bdi-miR9499	Bradi2g45740.1	245	1	4	3	3.5	NP
	Bdi-miR9499	Bradi1g72450.1	992	1	15	6	3.5	NP
	Bdi-miR9499	Bradi1g63610.1	371	1	1	7	NP	NP

Table S4. Arabidopsis miRNA Targets.

miRNA(s)	Gene	Reference
miR156	AT5G38610	9
miR156/7	AT1G27370	1
miR156/7	AT3G15270	9
miR156a	AT5G50570	9
miR156g	AT1G27360	9
miR156g	AT1G53160	1
miR156g	AT1G69170	2
miR156g	AT2G33810	1
miR156g	AT2G42200	9
miR156g	AT3G57920	2
miR156g	AT5G43270	1
miR159a	AT5G18100	2
miR159b	AT2G34010	2
miR159b	AT3G11440	3
miR159b	AT5G06100	3
miR160c	AT1G77850	1
miR160c	AT2G28350	1
miR160c	AT4G30080	1
miR161	AT1G06580	1
miR161	AT1G62590	9
miR161	AT1G63080	1
miR161	AT1G63130	4
miR161	AT1G63230	9
miR161	AT1G63330	9
miR161	AT1G63400	4
miR161.a2	AT5G41170	1
miR161a.1	AT1G63150	1
miR161a.1	AT5G41170	1
miR161a.2	AT1G63150	1
miR162	AT1G01040	5
miR163	AT1G15125	6
miR163	AT1G66690	6
miR163	AT1G66700	6
miR163	AT1G66720	6
miR163	AT3G44860	6
miR164	AT1G56010	1
miR164b	AT3G15170	1
miR164b	AT5G07680	1
miR164b	AT5G39610	5
miR164b	AT5G53950	1
miR164b	AT5G61430	1
miR165	AT1G30490	1
miR165	AT2G34710	1
miR165	AT4G32880	1

miR165a	AT5G60690	1
miR166	AT1G52150	1
miR167	AT1G30330	5
miR167d	AT5G37020	1
miR168	AT1G48410	1
miR168a	AT3G58030	2
miR169f	AT1G17590	1
miR169n	AT1G54160	1
miR169n	AT1G72830	5
miR169n	AT3G05690	5
miR169n	AT5G06510	5
miR169n	AT5G12840	2
miR170	AT3G60630	1
miR170	AT4G00150	1
miR171a	AT2G45160	7
miR171b	AT3G60630	1
miR171b	AT4G00150	1
miR172a	AT5G60120	5
miR172e	AT2G28550	5
miR172e	AT2G39250	2
miR172e	AT3G54990	2
miR172e	AT4G36920	5
miR172e	AT5G67180	5
miR173	AT1G50055	4
miR173	AT2G27400	4
miR173	AT2G39675	4
miR173	AT2G39681	8
miR173*	AT5G10950	9
miR319	AT1G30210	3
miR319c	AT1G53230	3
miR319c	AT2G31070	3
miR319c	AT3G15030	3
miR319c	AT4G18390	3
miR390	AT3G17185	8
miR390a	AT5G49615	8
miR390b	AT5G57735	8
miR393	AT1G12820	5
miR393	AT4G03190	5
miR393b	AT3G23690	5
miR393b	AT3G26810	5
miR393b	AT3G62980	5
miR394	AT1G27340	5
miR395a	AT4G14680	8
miR395e	AT3G22890	5
miR395e	AT5G10180	5
miR395e	AT5G43780	5
miR396	AT1G10120	2
miR396	AT2G22840	5

miR396	AT2G45480	5
miR396	AT4G24150	5
miR396	AT4G37740	5
miR396a	AT2G36400	5
miR396a	AT5G53660	5
miR397b	AT2G29130	5
miR397b	AT2G38080	5
miR397b	AT3G60250	2
miR397b	AT5G60020	5
miR398	AT3G15640	5
miR398a	AT1G08830	9
miR398a	AT2G28190	5
miR399e	AT2G33770	5
miR400	AT1G06580	9
miR403	AT1G31280	10
miR408	AT1G72230	2
miR408	AT2G02850	2
miR408	AT2G30210	10
miR408	AT2G44790	2
miR447a	AT5G60760	10
miR472	AT1G51480	11
miR472	AT5G43740	11
miR773	AT4G14140	11
miR774	AT3G19890	11
miR775	AT1G53290	10
miR778	AT2G22740	11
miR780	AT5G41610	11
miR822	AT5G02350	9
miR823	AT1G69770	2
miR824	AT3G14560	2
miR824	AT3G57230	10
miR827	AT1G02860	10
miR837-3p	AT5G08415	9
miR842	AT5G38550	10
miR844	AT5G51270	11
miR846	AT5G49850	11
miR856	AT5G41610	11
miR857	AT3G09220	11
miR858	AT1G06180	2
miR858	AT1G66230	2
miR858	AT2G47460	11
miR858	AT3G08500	11
miR858	AT5G49330	2
miR859	AT3G49510	11
miR863-3p	AT4G13495	9

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Table S5. Oligomers Used in This Study

Name	Sequence	Purpose
Bdi-FTL1 (Bradi1g48830) Forward	ATGCTCCTAGTCCAAGCGAC	Oligomer to amplify gene specific probe
Bdi-FTL1 (Bradi1g48830) Reverse	AGAGCTCGGCGAAGTCCCTG	Oligomer to amplify gene specific probe
Bdi-miR162	CCGGATGCAGAGGTTTATCGA	miRNA probe
Ath-miR162ab, Osa-miR162a	CTGGATGCAGAGGTTTATCGA	miRNA probe
miR166	GGGGAATGAAGCCTGGTCCGA	miRNA probe
Bridgeoligo of Bdi-miR399	gaatgcataagcgCCGGGCAAATCTCCTTTGGCA	Bridge oligonucleotide to detect miRNA
Bridgeoligo of Bdi-miR827	gaatgcataagcgTGTTTGCTGATGGTCATCTAA	Bridge oligonucleotide to detect miRNA
Bridgeoligo of Bdi-miR168	gaatgcataagcgGTCCCAGATCTGCACCAAGCGA	Bridge oligonucleotide to detect miRNA
Bridgeoligo of Bdi-miR5200	gaatgcataagcgAAGCCTTAGGGAGTATCTACA	Bridge oligonucleotide to detect miRNA
Bridgeoligo of Bdi-miR166a-eg	gaatgcataagcgGGGGAATGAAGCCTGGTCCGA	Bridge oligonucleotide to detect miRNA
Bridgeoligo of Bdi-miR166h	gaatgcataagcgAGGGATTGAAGCCTGGTCCGA	Bridge oligonucleotide to detect miRNA
Bridgeoligo of Bdi-miR166f	gaatgcataagcgGGAATGAAGCCTGGTCCGAGA	Bridge oligonucleotide to detect miRNA
Bridgeoligo of Bdi-miR156a-h	gaatgcataagcgGTGCTCACTCTCTTCTGTCA	Bridge oligonucleotide to detect miRNA
Bridgeoligo of Bdi-miR529	gaatgcataagcgAGGCTGTACTCTCTCTTCT	Bridge oligonucleotide to detect miRNA