**Table S5** List of targets regulated by the 21-nt phasiRNAs encoded by the novel *TAS* candidates identified in leaves and seedlings.

TAS candidate locus IDs	PhasiRNA IDs	PhasiRNA sequences	Target IDs	Target annotations
			AT1G62590.1	Pentatricopeptide repeat (PPR) adenylate cyclase
			AT1G62910.1	Pentatricopeptide repeat (PPR) superfamily member
Chr1-2460-21nt-L-23299523-23300313	LphasiR21-101		AT1G62930.1	Pentatricopeptide repeat (PPR) superfamily member
&	&	TCAATGCGCTGAAAGTGACTA	AT1G63130.1	TasiRNA generating locus
Chr1-3120-21nt-S-23299523-23300250	SphasiR21-32		AT1G63150.1	TasiRNA generating locus
			AT1G63330.1	Pentatricopeptide repeat (PPR) superfamily member
			AT5G41170.1	RFL24
Chr1-3120-21nt-S-23299523-23300250	SphasiR21-32	TCAATGCGCTGAAAGTGACTA	AT1G62914.1	Pentatricopeptide repeat (PPR) superfamily member
	SphasiR21-19	TTAGTTGATCAAATGGTTCAA	AT5G44800.1	CHROMATIN REMODELING 4 (CHR4)