

**Table S1:** Details of the previously reported MATE sequences used in this study

Sl. No.	Sequence name	Accession id	Species	Sequence length
1	AtALF_Xs	NP_001327615	<i>Arabidopsis thaliana</i>	416
2	AtDTX_Xs	Q9SIA5	<i>Arabidopsis thaliana</i>	476
3	AtFFT_Fa	F4JTB2	<i>Arabidopsis thaliana</i>	514
4	AtTT12_Fa	A0A1I9LM17	<i>Arabidopsis thaliana</i>	424
5	AtFRD3_Fe	Q9SFB0	<i>Arabidopsis thaliana</i>	526
6	AtMATE_AI	Q9SYD6	<i>Arabidopsis thaliana</i>	515
7	AtADS1_SA	A0A1P8AU64	<i>Arabidopsis thaliana</i>	227
8	AtDTX2_ABA	Q9FJ87	<i>Arabidopsis thaliana</i>	505
9	AtEDS_SA	Q945F0	<i>Arabidopsis thaliana</i>	543
10	AtZRZ_FH	Q9SLV0	<i>Arabidopsis thaliana</i>	532
11	NtMATE1_Na	A0A1U7XVR3	<i>Nicotiana tabacum</i>	500
12	NtMATE2_Na	A3KDM5	<i>Nicotiana tabacum</i>	500
13	Nt-JAT1_Na	A0A077LAP2	<i>Nicotiana tabacum</i>	507
14	GmFRD_Fe	C1IIX2	<i>Glycine max</i>	553
15	OsFRD_Fe	Q75L61	<i>Oryza sativa</i>	500
16	OsMATE_Ar	B8AWG0	<i>Oryza sativa</i>	500
17	OsFRD_AI	A0A0P0VC55	<i>Oryza sativa</i>	599
18	BoMATE_AI	A0A8X7QH85	<i>Brassica oleracea</i>	517
19	EcMATE3_AI	BAM68467	<i>Eucalyptus camaldulensis</i>	502
20	EcMATE2_AI	BAM68465	<i>Eucalyptus camaldulensis</i>	582
21	MdMATE1_Pa	A0A540L9H6	<i>Malus domestica</i>	505
22	MtMATE1_Pa	G7KD01	<i>Medicago truncatula</i>	504
23	MtMATE2_Pa	F4ZG52	<i>Medicago truncatula</i>	501
24	VvMATE1_Fa	F6H6E8	<i>Vitis vinifera</i>	489
25	VvMATE2_Fa	E0CUX3	<i>Vitis vinifera</i>	493