**Table S5.** 42 FMT candidate genes and their functions

No.	Gene number	Gene function
1	CsGy6G002700.1	Unknown Protein
2	CsGy6G002710.1	Pentatricopeptide repeat-containing family protein
3	CsGy6G002720.1	Unknown Protein
4	CsGy6G002730.1	cucumber peeling cupredoxin-like
5	CsGy6G002740.1	probable serine/threonine-protein kinase At1g54610
6	CsGy6G002750.1	Probable ethanolamine kinase
7	CsGy6G002760.1	Regulator of Vps4 activity in the MVB pathway protein
8	CsGy6G002770.1	Somatic embryogenesis receptor kinase 1
9	CsGy6G002780.1	Uncharacterized protein
10	CsGy6G002790.1	UDP-glycosyltransferase 73C5-like
11	CsGy6G002800.1	Uncharacterized protein
12	CsGy6G002810.1	Uncharacterized protein
13	CsGy6G002820.1	Uncharacterized protein
14	CsGy6G002830.1	Uncharacterized protein
15	CsGy6G002840.1	polyadenylate-binding protein 1-B-binding protein
16	CsGy6G002850.1	Uncharacterized protein
17	CsGy6G002860.1	Uncharacterized protein
18	CsGy6G002870.1	polyadenylate-binding protein 1-B-binding protein
19	CsGy6G002880.1	Unknown Protein
20	CsGy6G002890.1	signal peptide peptidase-like 3
21	CsGy6G002900.1	Unknown Protein
22	CsGy6G002910.1	protein PRD1 isoform X1
23	CsGy6G002920.1	protein TIC 22-like, chloroplastic isoform X1
24	CsGy6G002930.1	Histone-lysine N-methyltransferase
25	CsGy6G002940.1	voltage-gated hydrogen channel 1
26	CsGy6G002950.1	Cysteine proteinase inhibitor
27	CsGy6G002960.1	Splicing factor U2af large subunit B
28	CsGy6G002970.1	protein ROOT PRIMORDIUM DEFECTIVE 1
29	CsGy6G002980.1	MACPF domain-containing protein At4g24290-like
30	CsGy6G002990.1	Protein TRIGALACTOSYLDIACYLGLYCEROL 1, chloroplastic
31	CsGy6G003000.1	sn1-specific diacylglycerol lipase beta isoform X4
32	CsGy6G003010.1	Unknown Protein
33	CsGy6G003020.1	Vesicle transport protein
34	CsGy6G003030.1	Gamma-glutamylcyclotransferase
35	CsGy6G003040.1	ATP-dependent helicase/nuclease subunit A
36	CsGy6G003050.1	clathrin interactor EPSIN 3-like isoform X2
37	CsGy6G003060.1	STRUBBELIG-receptor family 5
38	CsGy6G003070.1	hypothetical protein (DUF1639)
39	CsGy6G003080.1	membrane-associated kinase regulator
40	CsGy6G003090.1	Glycoside hydrolase
41	CsGy6G003100.1	3,4-dihydroxy-2-butanone 4-phosphate synthase
42	CsGy6G003110.1	adenylate isopentenyltransferase-like