

Appendix A SLC and TaCOMT genotypes of the 157 wheat accessions

Accession	Origin	TaCOMT-3A allele ¹⁾	TaCOMT-3B allele	SLC ²⁾ ($\times 10^3$ OD ₂₈₀ /kg DW)				
				AY14	SX14	AY15	SJZ15	BLUE
Chinese Cultivars and advanced lines								
An 1331	Anhui	TaCOMT-3Ab	TaCOMT-3Bb	8.29	11.25	10.51	11.87	10.16
Fu 936	Anhui	TaCOMT-3Aa	TaCOMT-3Bb	12.45	12.47	10.56	13.33	12.18
Huaimai 18	Anhui	TaCOMT-3Aa	TaCOMT-3Bb	10.87	13.19	11.55	13.73	12.09
Huaimai 20	Anhui	TaCOMT-3Aa	TaCOMT-3Ba	8.02	10.83	9.70	12.95	10.04
Huaimai 21	Anhui	TaCOMT-3Ab	TaCOMT-3Ba	10.74	12.27	10.56	13.47	11.57
Su 0663	Anhui	TaCOMT-3Ab	TaCOMT-3Bb	9.86	10.72	11.09	11.78	10.75
Sunong 6	Anhui	TaCOMT-3Aa	TaCOMT-3Ba	11.41	11.65	9.99	13.04	11.46
Wan 23094	Anhui	TaCOMT-3Aa	TaCOMT-3Bb	11.22	13.29	12.94	14.29	12.70
Wanmai 19	Anhui	TaCOMT-3Ab	TaCOMT-3Bb	9.66	11.11	9.78	12.03	10.48
Wanmai 29	Anhui	TaCOMT-3Ab	TaCOMT-3Bb	9.48	11.67	9.91	13.75	10.93
Wanmai 33	Anhui	TaCOMT-3Aa	TaCOMT-3Ba	10.59	11.71	11.09	13.78	11.63
Wanmai 38	Anhui	TaCOMT-3Aa	TaCOMT-3Ba	9.18	13.86	11.57	15.53	12.02
Wanmai 50	Anhui	TaCOMT-3Ab	TaCOMT-3Bb	9.03	10.54	10.14	12.59	10.37
Wanmai 53	Anhui	TaCOMT-3Ab	TaCOMT-3Bb	10.51	10.19	9.06	12.42	10.52
Gaoyou 503	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	10.82	13.88	13.59	16.19	13.25
Guan 35	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	8.90	10.72	10.15	12.39	10.31
Han 6172	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	7.45	10.91	9.32	11.96	9.53
Heng 7228	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	10.50	12.55	12.55	15.88	12.58
Hengguan 33	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	9.38	11.40	11.13	11.91	10.74
Jinhe 9123	Hebei	TaCOMT-3Ab	TaCOMT-3Ba	9.88	12.26	10.61	12.97	11.17
Jishi 02-1	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	10.90	13.98	12.03	16.15	12.90
Shi 4185	Hebei	TaCOMT-3Ab	TaCOMT-3Ba	10.65	13.49	11.27	14.48	12.16
Shijiazhuang 8	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	10.28	12.30	10.15	14.35	11.51
Shijiazhuang 15	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	10.07	10.69	10.48	12.71	10.87
Shixin 733	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	9.45	12.94	11.07	13.23	11.31
Shixin 828	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	8.67	12.21	10.49	12.12	10.52
Shiyou 17	Hebei	TaCOMT-3Aa	TaCOMT-3Ba	11.16	13.05	11.49	14.64	12.35
11CA40	Henan	TaCOMT-3Aa	TaCOMT-3Ba	8.08	10.07	8.69	12.03	9.46
85 Zhong 33	Henan	TaCOMT-3Ab	TaCOMT-3Ba	9.78	10.37	10.71	11.62	10.53
Aikang 58	Henan	TaCOMT-3Aa	TaCOMT-3Ba	8.39	10.89	9.29	10.66	9.56
Bainong 64	Henan	TaCOMT-3Aa	TaCOMT-3Ba	8.82	12.01	8.84	11.94	10.08
Bainong 3217	Henan	TaCOMT-3Aa	TaCOMT-3Bb	8.76	11.57	9.22	13.63	10.46
Huapei 5	Henan	TaCOMT-3Aa	TaCOMT-3Bb	9.11	10.02	9.86	11.82	10.07
Lankao 2	Henan	TaCOMT-3Aa	TaCOMT-3Bb	8.43	11.40	9.36	12.34	10.06
Lankao 24	Henan	TaCOMT-3Aa	TaCOMT-3Bb	10.13	13.59	10.08	11.24	10.96
Lankao 906	Henan	TaCOMT-3Aa	TaCOMT-3Bb	9.75	10.14	9.61	10.00	9.84
Luohan 2	Henan	TaCOMT-3Ab	TaCOMT-3Bb	10.80	11.92	10.61	13.40	11.53
Luomai 21	Henan	TaCOMT-3Aa	TaCOMT-3Ba	8.96	10.39	8.84	11.05	9.65
Neixiang 5	Henan	TaCOMT-3Ab	TaCOMT-3Bb	13.97	13.15	14.28	19.29	15.11
Xinmai 19	Henan	TaCOMT-3Ab	TaCOMT-3Bb	9.54	11.85	11.71	13.01	11.27

Xinmai 9408	Henan	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Bb</i>	8.75	11.12	10.06	12.03	10.23
Yanzhan 4110	Henan	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Ba</i>	9.63	10.57	11.61	14.05	11.29
Yumai 2	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.03	14.20	11.76	16.06	12.89
Yumai 7	Henan	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Ba</i>	8.05	12.97	8.17	11.78	9.77
Yumai 13	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	8.83	11.05	8.88	11.27	9.77
Yumai 18	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	9.17	10.71	10.16	12.11	10.34
Yumai 21	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	9.10	11.46	10.65	11.90	10.53
Yumai 34	Henan	—	<i>TaCOMT-3Ba</i>	8.45	9.68	9.20	11.30	9.49
Yumai 35	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	10.66	10.16	9.89	11.64	10.60
Yumai 49	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	9.32	11.33	9.32	11.06	10.06
Yumai 50	Henan	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Ba</i>	12.28	13.51	12.85	14.89	13.22
Yumai 51	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	9.01	9.88	9.43	12.52	10.06
Yumai 57	Henan	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Bb</i>	8.61	10.26	10.22	12.76	10.24
Yumai 62	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	8.48	10.70	10.43	11.97	10.14
Yumai 63	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	9.65	12.31	13.40	13.64	11.95
Yumai 70	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	7.89	8.95	7.82	11.79	8.93
Zheng 9023	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	8.44	13.33	10.25	13.17	10.80
Zhengmai 366	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	8.53	12.69	9.24	12.37	10.29
Zhengyin 1	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.72	14.48	13.84	16.05	13.71
Zhengzhou 3	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	15.18	15.50	12.41	18.69	15.33
Zhong 892	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.46	9.84	11.23	11.68	10.47
Zhongmai 871	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.91	10.71	10.00	11.39	10.76
Zhongmai 875	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	9.61	11.53	8.50	12.22	10.25
Zhongyu 5	Henan	—	<i>TaCOMT-3Bb</i>	9.50	11.79	11.96	12.81	11.26
Zhou 8425B	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.10	11.20	8.72	7.86	9.09
Zhoumai 13	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	9.50	11.13	10.23	11.09	10.32
Zhoumai 16	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	8.90	11.39	9.46	10.54	9.84
Zhoumai 18	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.60	10.22	9.11	10.40	10.11
Zhoumai 19	Henan	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Bb</i>	9.70	10.88	10.00	12.73	10.66
Zhoumai 23	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	10.38	10.99	11.02	11.05	10.80
Zhoumai 25	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.72	11.23	8.07	13.03	10.31
Zhoumai 26	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	8.94	9.85	9.35	12.50	10.00
Zhoumai 28	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.43	11.47	9.29	12.70	10.84
Zhoumai 31	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	7.61	9.44	8.69	10.29	8.80
Zhoumai 32	Henan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	8.22	9.86	8.41	11.73	9.34
Aifeng 3	Shaanxi	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Ba</i>	13.85	11.52	13.35	16.23	13.86
Bima 1	Shaanxi	—	<i>TaCOMT-3Ba</i>	12.76	16.23	11.34	15.07	13.52
Bima 4	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	16.74	15.45	16.33	19.95	17.14
Fengchan 3	Shaanxi	—	<i>TaCOMT-3Ba</i>	12.35	13.18	13.70	13.74	13.15
Shan 150	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.81	10.60	10.88	14.16	11.19
Shan 229	Shaanxi	—	<i>TaCOMT-3Ba</i>	10.87	11.52	10.78	13.79	11.62
Shan 253	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.06	10.83	13.60	13.72	11.91
Shan 354	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.00	10.61	10.91	14.11	11.26
Shan 512	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.12	11.55	12.92	15.09	12.19

Shan 715	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	8.27	12.21	11.25	12.30	10.61
Shanmai 94	Shaanxi	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Ba</i>	9.16	10.75	10.13	11.51	10.21
Shanmai 509	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.50	12.07	9.75	13.53	10.91
Shannong 78-59	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.52	11.25	11.69	13.61	11.63
Shannong 981	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.84	10.56	9.22	13.18	10.56
Shanyou 225	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.11	11.77	12.96	14.82	12.53
Wunong 148	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.14	12.98	11.08	13.41	11.61
Xiaoyan 6	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.49	12.60	12.78	16.09	13.04
Xiaoyan 22	Shaanxi	—	<i>TaCOMT-3Bb</i>	10.27	12.50	11.47	14.19	11.84
Xiaoyan 54	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.35	13.27	13.24	14.06	12.42
Xiaoyan 81	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.47	12.69	11.24	14.04	11.50
Xinong 88	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.49	11.50	10.98	13.09	11.37
Xinong 291	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	14.17	16.06	12.64	16.97	14.74
Xinong 979	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.56	12.75	12.61	15.66	12.25
Xinong 1376	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.29	11.88	11.33	12.57	10.99
Xinong 2000-7	Shaanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.38	13.30	12.51	18.03	13.49
Jimai 19	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.75	12.48	11.15	14.28	12.30
Jimai 20	Shandong	—	<i>TaCOMT-3Ba</i>	9.98	13.24	10.51	15.13	11.84
Jimai 21	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	10.06	13.28	10.92	14.97	11.94
Jimai 22	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.66	11.68	11.16	13.04	11.50
Jinan 13	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	13.35	14.49	12.65	15.83	13.93
Jinan 17	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.06	13.21	11.80	13.97	12.27
Jining 16	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	8.78	9.85	10.83	11.19	10.02
Liangxing 66	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.71	11.57	9.94	12.99	10.83
Liangxing 99	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.77	12.08	11.01	14.57	11.56
Linmai 2	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	8.19	9.67	8.83	10.13	9.04
Linmai 4	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	8.72	10.62	6.84	10.17	8.90
Lumai 5	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	10.70	12.87	10.65	14.82	11.99
Lumai 6	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	9.24	12.00	11.42	12.64	11.03
Lumai 7	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.26	13.03	11.61	14.97	12.49
Lumai 8	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	10.93	12.17	9.63	13.32	11.36
Lumai 9	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	11.13	11.91	13.93	14.61	12.75
Lumai 11	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	11.20	12.32	10.96	12.04	11.52
Lumai 14	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.20	12.60	11.84	12.55	11.56
Lumai 15	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	8.98	13.43	9.67	13.16	10.86
Lumai 21	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.11	10.69	12.05	15.54	12.27
Luyuan 502	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.27	11.47	8.78	13.23	10.42
PH82-2	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.43	11.58	11.30	14.77	12.18
Shannong 20	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.71	11.52	11.46	11.81	10.93
Taishan 1	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.98	14.95	11.87	15.78	13.32
Taishan 5	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	11.88	12.65	13.16	15.91	13.25
Wennong 5	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.45	11.63	9.62	13.31	11.09
Wennong 14	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.08	12.32	10.44	14.15	11.47
Yannong 15	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.56	15.82	12.99	15.46	13.53

Yannong 18	Shandong	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Ba</i>	9.69	11.68	9.13	10.66	10.11
Yannong 19	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	10.72	12.79	11.77	14.46	12.18
Zimai 12	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	9.18	10.96	10.89	11.11	10.35
Zixuan 2	Shandong	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.73	13.38	10.73	15.80	12.68
Jinmai 61	Shanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	10.26	10.94	8.44	14.22	10.81
Linhan 2	Shanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.18	13.66	14.95	15.86	13.61
Linkang 12	Shanxi	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	13.02	14.51	10.40	16.42	13.38
Cultivars from foreign countries								
Aca 601	Argentina	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.69	13.92	12.22	15.10	12.98
Aca 801	Argentina	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.71	13.89	13.78	15.78	13.52
Klein Flecha	Argentina	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	12.58	13.48	11.84	14.18	12.91
Klein Jabal 1	Argentina	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	12.39	16.04	13.82	16.23	14.24
Nidera Baguette 10	Argentina	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	14.08	18.63	14.59	18.58	16.01
Nidera Baguette 20	Argentina	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	13.48	16.25	14.45	14.81	14.50
ProINTA Colibr 1	Argentina	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	14.28	13.85	14.73	18.76	15.33
Sunstate	Australia	—	<i>TaCOMT-3Ba</i>	12.25	16.26	13.27	13.40	13.46
Abbondanza	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	15.62	18.38	14.18	17.28	16.10
Barra	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.77	13.17	11.28	14.32	12.11
Dorico	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	12.94	14.97	14.37	16.15	14.37
Funo	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	13.74	15.27	12.89	15.21	14.12
Genio	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	12.08	15.19	14.26	18.27	14.56
Lampo	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	12.12	13.23	11.67	15.41	12.94
Libero	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.63	14.77	13.01	15.84	13.46
Mantol	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.93	12.98	12.55	14.14	12.41
Sagittario	Italy	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	11.69	11.94	12.45	13.43	12.32
Kanto 107	Japan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.62	12.93	10.49	12.43	11.39
Kitanoakaori	Japan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.99	11.86	12.03	11.46	11.51
Norin 61	Japan	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Ba</i>	10.14	13.62	11.51	14.57	12.08
Norin 67	Japan	<i>TaCOMT-3Ab</i>	<i>TaCOMT-3Ba</i>	10.44	12.88	12.54	14.19	12.23
HK1/6/NVSR3/5/B	Turkey	<i>TaCOMT-3Aa</i>	<i>TaCOMT-3Bb</i>	13.18	13.82	13.42	16.36	14.07
EZ/TVR/5/CFN/BE								
Z//SU92/CI13645/3								
NAI60								

¹⁾“—” indicates no target band was detected.

²⁾ Values of AY14 (Anyang, 2013–2014 cropping season), SX14 (Suixi, 2013–2014), AY15 (Anyang, 2014–2015) and SJZ15 (Shijiazhuang, 2014–2015) are the means of three replicates in each environment; BLUE values are the best linear unbiased estimations across four environments.

<i>TaCOMT-3Ba</i>	ATCGCTCAGTCGCTCGCTCACACTCAACGCCACGTAGCAGCAGCTCGGCT	50
<i>TaCOMT-3Bb</i>	ATCGCTCAGTCGCTCGCTCACACTCAACGCCACGTAGCAGCAGCTCGGCT	50
<i>TaCOMT-3Ba</i>	CCGGCGGGCAGAAGCAAGCAGAG ^{ATC} GGGTCGATCGCCGCCGGCGCCGA	100
<i>TaCOMT-3Bb</i>	CCGGCGGGCAGAAGCAAGCAGAG ^{ATC} GGGTCGATCGCCGCCGGCGCCGA	100
<i>TaCOMT-3Ba</i>	CGAGGATGCGTGCATGTACGCTCTCCAGCTCGTCTCGTCTCGATCCTCC	150

<i>TaCOMT-3Bb</i>	<u>CGAGGATGCGTGATGTACGCTCTCCAGCTCGTCTCGTTCGATCCTCC</u>	150
<i>TaCOMT-3Ba</i>	<u>CGATGACGCTGAAGAACGCCATCGAGCTGGGGCTCCTCGAGACCCTGATG</u>	200
<i>TaCOMT-3Bb</i>	<u>CGATGACGCTGAAGAACGCCATCGAGCTGGGGCTCCTCGAGACCCTGATG</u>	200
<i>TaCOMT-3Ba</i>	<u>GCCGCCGGCGGCAAGTTCTTGACTCCCGCTGAGGTGGCAGCCAAGCTCCC</u>	250
<i>TaCOMT-3Bb</i>	<u>GCCGCCGGCGGCAAGTTCTTGACTCCCGCTGAGGTGGCAGCCAAGCTCCC</u>	250
<i>TaCOMT-3Ba</i>	<u>GTCCCGGGCGAATCCGGAAGCGCCGACATGGTGGACCGTATGCTCCGTC</u>	300
<i>TaCOMT-3Bb</i>	<u>GTCCCGGGCGAATCCGGAAGCGCCGACATGGTGGACCGTATGCTCCGTC</u>	300
<i>TaCOMT-3Ba</i>	<u>TGTTGGCCTCGTACAACGTGGTGTCTGTCAGGACGGAGGAGGGCAAGGAC</u>	350
<i>TaCOMT-3Bb</i>	<u>TGTTGGCCTCGTACAACGTGGTGTCTGTCAGGACGGAGGAGGGCAAGGAC</u>	350
<i>TaCOMT-3Ba</i>	<u>GGCCGCCTCTCCCGCGGTACGGCGCCGCGCCCGTGTGCAAGTACCTCAC</u>	400
<i>TaCOMT-3Bb</i>	<u>GGCCGCCTCTCCCGCGGTACGGCGCCGCGCCCGTGTGCAAGTACCTCAC</u>	400
<i>TaCOMT-3Ba</i>	<u>CCCCAACGAGGACGGCGTGTCCATGTCGGCGCTCGCGCTCATGAACCAGG</u>	450
<i>TaCOMT-3Bb</i>	<u>CCCCAACGAGGACGGCGTGTCCATGTCGGCGCTCGCGCTCATGAACCAGG</u>	450
<i>TaCOMT-3Ba</i>	<u>ACAAGGTCCTCATGGAGAGCTGGTGTAGCTAGATCGATCATCCCTCTTTCT</u>	500
<i>TaCOMT-3Bb</i>	<u>ACAAGGTCCTCATGGAGAGCTGGTGTAGCTAGATCGATCATCCCTCTTTCT</u>	500
<i>TaCOMT-3Ba</i>	<u>TCTTCTTACCTTGCCCATTTGCTCAGTATATACTCTCTGTTGCAAAAGAT</u>	550
<i>TaCOMT-3Bb</i>	<u>TCTTCTTACCTTGCCCATTTGCTCAGTATATACTCTCTGTTGCAAAAGAT</u>	550
<i>TaCOMT-3Ba</i>	<u>GTGGCAAGCAGAGCACATATAAGTTCCAATGTGTGGGTGAATCATAACCGT</u>	600
<i>TaCOMT-3Bb</i>	<u>GTGGCAAGCAGAGCACATATAAGTTCCAATGTGTGGGTGAATCATAACCGT</u>	600
<i>TaCOMT-3Ba</i>	<u>GCCATTTTTTCAGGTACTATCTCAAGGATGCGGTCCCTCGACGGTGGCATCC</u>	650
<i>TaCOMT-3Bb</i>	<u>GCCATTTTTTCAGGTACTATCTCAAGGATGCGGTCCCTCGACGGTGGCATCC</u>	650
<i>TaCOMT-3Ba</i>	<u>CGTTCAACAAGGCGTACGGGATGTCGGCGTTCGAGTACCACGGCACGGAC</u>	700
<i>TaCOMT-3Bb</i>	<u>CGTTCAACAAGGCGTACGGGATGTCGGCGTTCGAGTACCACGGCACGGAC</u>	700
<i>TaCOMT-3Ba</i>	<u>CCACGCTTCAACCGGTCTTCAACGAGGGGATGAAGAACCATTCCATCAT</u>	750
<i>TaCOMT-3Bb</i>	<u>CCACGCTTCAACCGGTCTTCAACGAGGGGATGAAGAACCATTCCATCAT</u>	750
<i>TaCOMT-3Ba</i>	<u>CATCACCAAGAAGCTCCTCGAGTCCTACAAGGGCTTCGAGGGCCTCGGCA</u>	800
<i>TaCOMT-3Bb</i>	<u>CATCACCAAGAAGCTCCTCGAGTCCTACAAGGGCTTCGAGGGCCTCGGCA</u>	800
<i>TaCOMT-3Ba</i>	<u>CCCTCGTTCGACGTGGGCGGTGGCGTTCGGCGCCACCGTGGCCGCCATCACC</u>	850
<i>TaCOMT-3Bb</i>	<u>CCCTCGTTCGACGTGGGCGGTGGCGTTCGGCGCCACCGTGGCCGCCATCACC</u>	850
<i>TaCOMT-3Ba</i>	<u>GCTCACTACCCACCATCAAGGGCATCAACTTTGACCTTCCCACGTCAT</u>	900
<i>TaCOMT-3Bb</i>	<u>GCTCACTACCCACCATCAAGGGCATCAACTTTGACCTTCCCACGTCAT</u>	900
<i>TaCOMT-3Ba</i>	<u>CAGTGAGGCGCCCGTTCCTCCCGGTGTCACCCACGTCGGCGGGCAGATGT</u>	950
<i>TaCOMT-3Bb</i>	<u>CAGTGAGGCGCCCGTTCCTCCCGGTGTCACCCACGTCGGCGGGCAGATGT</u>	950
<i>TaCOMT-3Ba</i>	<u>TCCAGAAGGTGCCCTCGGGCGACGCCATCCTCATGAAGTGGATCCTCCAC</u>	1000
<i>TaCOMT-3Bb</i>	<u>TCCAGAAGGTGCCCTCGGGCGACGCCATCCTCATGAAGTGGATCCTCCAC</u>	1000

<i>TaCOMT-3Ba</i>	<u>GACTGGAGCGACGAGCACTGCGCGACGCTGCTCAAGAACTGCTACGACGC</u>	1050
<i>TaCOMT-3Bb</i>	<u>GACTGGAGCGACGAGCACTGCGCGACGCTGCTCAAGAACTGCTACGACGC</u>	1050
<i>TaCOMT-3Ba</i>	<u>GTTGCCGGCGCACGGCAAGGTGGTGCCTCGTG</u> GAGTGCATCCTGCC <u>TGTGA</u>	1100
<i>TaCOMT-3Bb</i>	<u>GTTGCCGGCGCACGGCAAGGTGGTGCCTCGTG</u> GAGTGCATCCTGCC <u>GGTGA</u>	1100
<i>TaCOMT-3Ba</i>	<u>ACCCGGAGGGCAGCGCCTAAGGCGCAGGGGTGTTCCATGTCGACATGATC</u>	1150
<i>TaCOMT-3Bb</i>	<u>ACCCGGAGGGCAGCGCCTAAGGCGCAGGGGTGTTCCATGTCGACATGATC</u>	1150
<i>TaCOMT-3Ba</i>	<u>ATGCTCGCGCACAAACCCGGGTGGCAGGGAGAGGTACGAGAGGGAGTTCGA</u>	1200
<i>TaCOMT-3Bb</i>	<u>ATGCTCGCGCACAAACCCGGGTGGCAGGGAGAGGTACGAGAGGGAGTTCGA</u>	1200
<i>TaCOMT-3Ba</i>	<u>GGCCCTGGCCAAGGGCGCCGGGTTCGCCCCATGAAGACTACTTACATCT</u>	1250
<i>TaCOMT-3Bb</i>	<u>GGCCCTGGCCAAGGGCGCCGGGTTCGCCCCATGAAGACTACTTACATCT</u>	1250
<i>TaCOMT-3Ba</i>	<u>ACGCCAACGCATGGGCCATCGAGTTCACCTAAG</u> TAG <u>ATGATCCATGACAAC</u>	1300
<i>TaCOMT-3Bb</i>	<u>ACGCCAACGCATGGGCCATCGAGTTCACCTAAG</u> TAG <u>ATGATCCATGACAAC</u>	1300
<i>TaCOMT-3Ba</i>	GAGTCTACCTCTCTGATGCATCCACCTGCATGTGTACTTTCTCTTCGTTT	1350
<i>TaCOMT-3Bb</i>	GAGTCTACCTCTCTGATGCATCCACCTGCATGTGTACTTTCTCTTCGTTT	1350
<i>TaCOMT-3Ba</i>	TTCCCTTCAAAAAAATTTCACTCTCTGAGTCAATCTAAAATCTAATGTTT	1400
<i>TaCOMT-3Bb</i>	TTCCCTTCAAAAAAATTTCACTCTCTGAGTCAATCTAAAATCTAATGTTT	1400
<i>TaCOMT-3Ba</i>	GTGTCGTCGATTGATTTCGAAATGTACTACCATTAGTAACCGTCGGTTGAT	1450
<i>TaCOMT-3Bb</i>	GTGTCGTC.....	1408
<i>TaCOMT-3Ba</i>	TTGAAATGTACTACCATTAATAATGTTAATTGCTCTTAATGGTTGTGTGT	1500
<i>TaCOMT-3Bb</i>	.....	1408
<i>TaCOMT-3Ba</i>	ACTACCTCCGTCCGGGTTTATTGGTCCCATTTGTATTTTGTGCCAAATTT	1550
<i>TaCOMT-3Bb</i>	.....	1408
<i>TaCOMT-3Ba</i>	TGACCATAGATTGAACTAACAAAATGTTACGCATGTCACCAAACATTAT	1600
<i>TaCOMT-3Bb</i>	.....	1408
<i>TaCOMT-3Ba</i>	ATTTTTGAAAATATGTTCAAATAGGAATCCAATA A AGATAATTTTTCTTG	1650
<i>TaCOMT-3Bb</i>	.....CAAT A AGATAATTTTTCTTG	1428
<i>TaCOMT-3Ba</i>	ACATGCAT A TAAACATTTTGTAGTTAAATTTTTAGTCAAAATTTGACACAA	1700
<i>TaCOMT-3Bb</i>	ACATGCAT A TAAACATTTTGTAGTTAAATTTTTAGTCAAAATTTGACACAA	1478
<i>TaCOMT-3Ba</i>	ACTATAAAGGGGACGGACC TA	1721
<i>TaCOMT-3Bb</i>	ACTATAAAGGGGACGGACC TA	1499

Appendix B Sequence alignment of *TaCOMT-3Ba* and *TaCOMT-3Bb*. The exons are *underlined*; initiation and termination codons are *boxed*; SNPs are *shadowed*; and forward and reverse primers of *TaCOMT-3BM* are *boxed* and *bold*.

<i>TaCOMT-3Aa</i>	CATCCTTTGCTTTTCTCAAGACCAAGAAGAAAAAGCAGTTGGTGTGGTG	50
<i>TaCOMT-3Ab</i>	CATCCTTTGCTTTTCTCAAGACCAAGAAGAAAAAGCAGTTGGTGTGGTG	50

TaCOMT-3Aa TGGTGTGGTGGTTGGTGAGCCAGAAAAGCCCCATATAACCAAGGCCCTTCC 100
TaCOMT-3Ab TGGTGTGGTGGTTGGTGAGCCAGAAAAGCCCCATATAACCAAGGCCCTTCC 100

TaCOMT-3Aa CGTCCTCCCTCCAAAGTAGGTCATCGCTCAGTCGCTCGCTCACACTCACC 150
TaCOMT-3Ab CGTCCTCCCTCCAAAGTAGGTCATCGCTCAGTCGCTCGCTCACACTCACC 150

TaCOMT-3Aa GCCACGTAGCAGCAGCTCGGCTCCGGAGAGGCAGAAGCAAGCAGAGATGG 200
TaCOMT-3Ab GCCACGTAGCAGCAGCTCGGCTCCGGAGAGGCAGAAGCAAGCAGAGATGG 200

TaCOMT-3Aa GCTCCATTGCCGCCGGCGCCGACGAGGATGCGTGCATGTACGCTCTCCAG 250
TaCOMT-3Ab GCTCCATTGCCGCCGGCGCCGACGAGGATGCGTGCATGTACGCTCTCCAG 250

TaCOMT-3Aa CTCGTCTCGTTCATCCTCCCGATGACGCTGAAGAACGCCATCGAGCT 300
TaCOMT-3Ab CTCGTCTCGTTCATCCTCCCGATGACGCTGAAGAACGCCATCGAGCT 300

TaCOMT-3Aa GGGACTCCTCGAGACCCTGATGGCCGCCGGCGGCAAGTTGCTGACTCCCCG 350
TaCOMT-3Ab GGGACTCCTCGAGACCCTGATGGCCGCCGGCGGCAAGTTGCTGACTCCCCG 350

TaCOMT-3Aa CCGAGGTTGCTGCCAAGCTCCCTTCCGCGGCGAATCCGGAAGCGCCGGAC 400
TaCOMT-3Ab CCGAGGTTGCTGCCAAGCTCCCTTCCGCGGCGAATCCGGAAGCGCCGGAC 400

TaCOMT-3Aa ATGGTGGACCGCATGCTCCGTCTGCTGGCCTCGTACAACGTGGTGTTCGTG 450
TaCOMT-3Ab ATGGTGGACCGCATGCTCCGTCTGCTGGCCTCGTACAACGTGGTGTTCGTG 450

TaCOMT-3Aa CAAGACGGAGGAGGGCAAGGACGGCCGCTCTCTCGGCGGTACGGCGCCG 500
TaCOMT-3Ab CAAGACGGAGGAGGGCAAGGACGGCCGCTCTCTCGGCGGTACGGCGCCG 500

TaCOMT-3Aa CGCCGGTGTGCAAGTACCTCACCCCCAACGAGGACGGCGTCTCCATGTTCG 550
TaCOMT-3Ab CGCCGGTGTGCAAGTACCTCACCCCCAACGAGGACGGCGTCTCCATGTTCG 550

TaCOMT-3Aa GCGCTGGCGCTCATGAACCAGGACAAGGTCCTCATGGAGAGCTGGTGAGC 600
TaCOMT-3Ab GCGCTGGCGCTCATGAACCAGGACAAGGTCCTCATGGAGAGCTGGTGAGC 600

TaCOMT-3Aa TAGATCGATCATCCCTCTTTCTTCATCTTAGTTTGCCCTCATGAGTGGC 650
TaCOMT-3Ab TAGATCGATCATCCCTCTTTCTTCATCTTAGTTTGCCCTCATGAGTGGC 650

TaCOMT-3Aa ATCTCCCTGTTGCAAAAGATGTGGCAAGCAGAGCACATGCATGTTCCAAA 700
TaCOMT-3Ab ATCTCCCTGTTGCAAAAGATGTGGCAAGCAGAGCACATGCATGTTCCAAA 700

TaCOMT-3Aa TGTGTGGGTGAATCATAACCGTACCATTTTTTCAGGTACTATCTCAAGGATG 750
TaCOMT-3Ab TGTGTGGGTGAATCATAACCGTACCATTTTTTCAGGTACTATCTCAAGGATG 750

TaCOMT-3Aa CGGTCCCTCGACGGTGGCATCCCATTCAACAAGGCGTACGGGATGTCGGCG 800
TaCOMT-3Ab CGGTCCCTCGACGGTGGCATCCCATTCAACAAGGCGTACGGGATGTCGGCG 800

TaCOMT-3Aa TTCAAGTACCACGGCACGGACCCGCGCTTCAACCGCGTGTTC AACGAGGG 850
TaCOMT-3Ab TTCAAGTACCACGGCACGGACCCGCGCTTCAACCGCGTGTTC AACGAGGG 850

TaCOMT-3Aa GATGAAGAACCATTCCATCATCATCACCAAGAAGCTCCTCGAGTCCTACA 900
TaCOMT-3Ab GATGAAGAACCATTCCATCATCATCACCAAGAAGCTCCTCGAGTCCTACA 900

TaCOMT-3Aa AGGGCTTCGAGGGCCTCAACACCCTCGTCTGACGTGGCGGGGGCGTGGC 950
TaCOMT-3Ab AGGGCTTCGAGGGCCTCAACACCCTCGTCTGACGTGGCGGGGGCGTGGT 950

<i>TaCOMT-3Aa</i>	<u>GCCACCGTGGCCGCCATCACCGCTCACTACCCACCATCAAGGGCATCAA</u>	1000
<i>TaCOMT-3Ab</i>	<u>GCCACCGTGGCCGCCATCACCGCTCACTACCCACCATCAAGGGCATCAA</u>	1000
<i>TaCOMT-3Aa</i>	<u>CTTCGACCTTCCCCACGTCATCTCCGAGGCGCCGCCGTTCCCGGGTGTCA</u>	1050
<i>TaCOMT-3Ab</i>	<u>CTTCGACCTTCCCCACGTCATCTCCGAGGCGCCGCCGTTCCCGGGTGTCA</u>	1050
<i>TaCOMT-3Aa</i>	<u>CCCACGTCGGCGGCGACATGTTTCAGAAGGTGCCCTCGGGCGACGCCATC</u>	1100
<i>TaCOMT-3Ab</i>	<u>CCCACGA.GGCGGCGACATGTTTCAGAAGGTGCCCTCGGGCGACGCCATC</u>	1099
<i>TaCOMT-3Aa</i>	<u>CTCATGAAGTGGATCCTCCACGACTGGAGCGACGAGCACTGCGCGACGCT</u>	1150
<i>TaCOMT-3Ab</i>	<u>CTCATGAAGTGGATCCTCCACGACTGGAGCGACGAGCACTGCGCGACGCT</u>	1149
<i>TaCOMT-3Aa</i>	<u>GCTCAAGAACTGCTACAACGCCTTGCCGCCGCACGGCAAGGTGGTGTCTCG</u>	1200
<i>TaCOMT-3Ab</i>	<u>GCTCAAGAACTGCTACAACGCCTTGCCGCCGCACGGCAAGGTGGTGTCTCG</u>	1199
<i>TaCOMT-3Aa</i>	<u>TGGAGTGCATCCTGCCGGTGAACCCCGAAGCCACGCCTAAGGCTCAGGGG</u>	1250
<i>TaCOMT-3Ab</i>	<u>TGGAGTGCATCCTGCCGGTGAACCCCGAAGCCACGCCTAAGGCTCAGGGG</u>	1249
<i>TaCOMT-3Aa</i>	<u>GTGTTCCATGTGCGACATGATCATGCTCGCGCACAACCCAGGTGGCAGGGA</u>	1300
<i>TaCOMT-3Ab</i>	<u>GTGTTCCATGTGCGACATGATCATGCTCGCGCACAACCCAGGTGGCAGGGA</u>	1299
<i>TaCOMT-3Aa</i>	<u>GAGGTACGAGAGGGAGTTCGAGGCCCTGGCCAAGGGCGCCGGGTTTCGCCA</u>	1350
<i>TaCOMT-3Ab</i>	<u>GAGGTACGAGAGGGAGTTCGAGGCCCTGGCCAAGGGCGCCGGGTTTCGCCA</u>	1349
<i>TaCOMT-3Aa</i>	<u>CCATGAAGACCACTTACATCTACGCTAACGCATGGGCCATCGAGTTCACT</u>	1400
<i>TaCOMT-3Ab</i>	<u>CCATGAAGACCACTTACATCTACGCTAACGCATGGGCCATCGAGTTCACT</u>	1399
<i>TaCOMT-3Aa</i>	<u>AAGTAGATGGTCCATGACAACGTCCTCCCATCTGATGCATTAATTCAACT</u>	1450
<i>TaCOMT-3Ab</i>	<u>AAGTAGATGGTCCATGACAACGTCCTCCCATCTGATGCATTAATTCAACT</u>	1449
<i>TaCOMT-3Aa</i>	<u>GCAAGTGTACTTTCTCTTGGGTTTCCCTTAATTTTGTCAATCTCTGAATC</u>	1500
<i>TaCOMT-3Ab</i>	<u>GCAAGTGTACTTTCTCTTGGGTTTCCCTTAATTTTGTCAATCTCTGAATC</u>	1499
<i>TaCOMT-3Aa</i>	<u>ATTCTAAATTCTAATGTTTGTGCCATCGATTGATTCGGAATGTACTGCCA</u>	1550
<i>TaCOMT-3Ab</i>	<u>ATTCTAAATTCTAATGTTTGTGCCATCGATTGATTCGGAATGTACTGCCA</u>	1549
<i>TaCOMT-3Aa</i>	<u>TTAATAATGTTAATTGCTCCTAATGGTTGTGTGTATTAACTCCACCCTT</u>	1600
<i>TaCOMT-3Ab</i>	<u>TTAATAATGTTAATTGCTCCTAATGGTTGTGTGTATTAACTCCACCCTT</u>	1599
<i>TaCOMT-3Aa</i>	TGTTGAAGAAAAATGGTTGTGT	1622
<i>TaCOMT-3Ab</i>	TGTTGAAGAAAAATGGTTGTGT	1621

Appendix C Sequence alignment of *TaCOMT-3Aa* and *TaCOMT-3Ab*. Exons are *underlined*; initiation and termination codons are *boxed*; SNPs are *shadowed*; the *BmgBI* recognition sequences are *boxed* and *bold*, and the *BmgBI* cleavage sites are indicated with red arrows.

TaCOMT-3D CCTGAAGACCAAGAAGAAAAAGCAGTTGGTGTGGTGTGGTGGTTGGTGAG 50

TaCOMT-3D CCAGAAAGCCCCATATAACCAGGCCCTTCCCGTCCTCCCTCCAAAGTAG 100

TaCOMT-3D GTCATCGCTCAGTCGCTCGCTCACACTCAACGCACGTACCCGCAGCTCGG 150

TaCOMT-3D CTCCGGAGAGGCAGAAGCTAGCAGAGATGGCTCCATCGCCGCCGGCGCC 200

TaCOMT-3D GATGAGGATGCGTGCATGTACGCTCTCCAGCTCGTCTCGTCCATCCT 250

TaCOMT-3D CCCGATGACGCTGAAGAACGCCATCGAGCTGGGACTCCTCGAGACTCTGA 300

TaCOMT-3D TGTCTGCCGGCGGCAAGTTCTTGACTCCCGCCGAGGTGGCTGCCAAGCTC 350

TaCOMT-3D CCATCCGCAGCGAATCCGGAAGCGCCGGACATGGTGGACCGTATGCTCCG 400

TaCOMT-3D TCTGCTGGCCTCGTACAACGTGGTGTCTGTCAGGACGGAGGAGGGCAAGG 450

TaCOMT-3D ACGGCCGTCTCTCCAGGCGGTATGGTGTGCGCCCGTGTGCAAGTACCTC 500

TaCOMT-3D ACCCCAACGAGGACGGCGTCTCGATGTCAGCGCTCGCGCTCATGAACCA 550

TaCOMT-3D GGACAAGGTCCTCATGGAGAGCTGGTGAGCTAGATCGATCATTCCTCTTT 600

TaCOMT-3D CTTTCATCTTACTTTGCCCATTTGCTCAGTACTCTTTGTTTCAGAGAGTAGT 650

TaCOMT-3D AGCATCTCCCTGTTGCAAAAAGATGTGGCAAGCAGAGCACATATATGTTCC 700

TaCOMT-3D AATGTGTGGGTGAATCATAACCGTACCATTTTTTCAGGTACTATCTCAAGGA 750

TaCOMT-3D TGCGGTCTCGACGGTGGCATCCCATTTCAACAAGGCATACGGGATGTCCG 800

TaCOMT-3D CGTTCGAGTACCACGGCACGGACCTGCGCTTCAACCGCGTCTTCAACGAA 850

TaCOMT-3D GGGATGAAGAACCATTCCATCATCATCACCAAGAAGCTCCTCGAACTCTA 900

TaCOMT-3D CAAGGGCTTCGAGGGCCTCAACACCCTCGTTCGACGTGGGCGGGGGCGTCG 950

TaCOMT-3D GCGCCACCGTGGCCGCCATCACCGCTCACTACCCCGCCATCAAGGGCATC 1000

TaCOMT-3D AACTTCGACCTTCCCCACGTCATCTCCGAGGCGCCGCGTTCGCCGTTGT 1050

TaCOMT-3D CACCCACGTCGGCGGCGACATGTTCCAGAAGGTGCCCTCGGGTGACGCCA 1100

TaCOMT-3D TCCTCATGAAGTGGATCCTCCACGACTGGAGCGACGAGCACTGCGCTAAG 1150

TaCOMT-3D CTGCTCAAGAACTGCTACGACGCCTTGCCGGCGCACGGCAAGGTGGTGCT 1200

TaCOMT-3D CGTGGAGTGCATCCTGCCGGTGAACCCGGAAGCCACGCCTAAGGCGCAGG 1250

TaCOMT-3D GAGTGTTCATGTTCGATATGATCATGCTCGCGCACAACCCGGGTGGCAGG 1300

TaCOMT-3D GAGAGGTACGAGAGGGAGTTCGAGGCCCTGGCCAAGGGCGCCGGTTCGC 1350

TaCOMT-3D CGCCATGAAGACCACTTACATCTACGCCAATGCATGGGCCATCGAGTTCA 1400

TaCOMT-3D CTAAGTAGATGATGAATGACAACGTCCACCCATCTGATGCATCCACCTGC 1450

TaCOMT-3D ATGTGTACTTTCTCTTGGTTTTTCTTAATTTTGTTCATTCTCTGAGTCAT 1500
TaCOMT-3D TCTAAATTCTAATGTTTGGCGTCGTCATTTCATTCGAAATGTACTACCATT 1550
TaCOMT-3D AATAATGTTAATTGCTCTTAATGGTTGTGTGTATTAAAAATCCACCTTTTG 1600
TaCOMT-3D TTGAAGAAAAATGGTTGTGTGTATCTTATATATCTATATCTAGAGTCATC 1650
TaCOMT-3D CCTACTAATTTATTTATCTTAACAAGGATGTCAAGTGGAACAAAAACAATC 1700
TaCOMT-3D AAGTAATTTTAACATGCTTCCTTTTACCTCCTCTT 1735

Appendix D Genomic DNA sequence of *TaCOMT-3D*. Exons are *underlined*; and the initiation and termination codons are *boxed*.

	I	II	III	
<i>TaCOMT-3Aa</i>	<u>TLVDVGGG</u> VGATVAAITAHYPTIKGINFDLPHVISEAPFFPGVTHVGGDMFQKVP	<u>SGDAILMKWI</u>		260
<i>TaCOMT-3Ab</i>	<u>TLVDVGGG</u> VGATVAAITAHYPTIKGINFDLPHVISEAPFFPGVTHVGGDMFQKVP	<u>SGDAILMKWI</u>	.....	256
<i>TaCOMT-3Ba</i>	<u>TLVDVGGG</u> VGATVAAITAHYPTIKGINFDLPHVISEAPFFPGVTHVGGDMFQKVP	<u>SGDAILMKWI</u>		260
<i>TaCOMT-3Bb</i>	<u>TLVDVGGG</u> VGATVAAITAHYPTIKGINFDLPHVISEAPFFPGVTHVGGDMFQKVP	<u>SGDAILMKWI</u>		260
<i>TaCOMT-3D</i>	<u>TLVDVGGG</u> VGATVAAITAHYPTIKGINFDLPHVISEAPFFPGVTHVGGDMFQKVP	<u>SGDAILMKWI</u>		260
		IV	V	
<i>TaCOMT-3Aa</i>	<u>LHDWSDEHCATLLKNCYNALP</u> RGKVVIVLVECILPVNPEATPRAQGVFHVDMIMLAHNEGG	<u>RERYE</u>		325
<i>TaCOMT-3Ab</i>	.....	.....	.....	256
<i>TaCOMT-3Ba</i>	<u>LHDWSDEHCATLLKNCYDALP</u> RGKVVIVLVECILPVNPEATPRAQGVFHVDMIMLAHNEGG	<u>RERYE</u>		325
<i>TaCOMT-3Bb</i>	<u>LHDWSDEHCATLLKNCYDALP</u> RGKVVIVLVECILPVNPEATPRAQGVFHVDMIMLAHNEGG	<u>RERYE</u>		325
<i>TaCOMT-3D</i>	<u>LHDWSDEHCATLLKNCYDALP</u> RGKVVIVLVECILPVNPEATPRAQGVFHVDMIMLAHNEGG	<u>RERYE</u>		325
<i>TaCOMT-3Aa</i>	<u>REFEALAKGAGFAAMKTTYIYANAWA</u> IEFTK			356
<i>TaCOMT-3Ab</i>	.....			256
<i>TaCOMT-3Ba</i>	<u>REFEALAKGAGFAAMKTTYIYANAWA</u> IEFTK			356
<i>TaCOMT-3Bb</i>	<u>REFEALAKGAGFAAMKTTYIYANAWA</u> IEFTK			356
<i>TaCOMT-3D</i>	<u>REFEALAKGAGFAAMKTTYIYANAWA</u> IEFTK			356

Appendix E Sequence alignment of C-terminal ends of *TaCOMT* polypeptide sequences. The red-boxes indicate the five consensus regions at the C-terminal end of the *O*-methyltransferase polypeptide (Ibrahim *et al.* 1998).