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## APPENDIX

Table A1 List of selective primer combinations used in cDNA-AFLP analysis

E + AA (E1)	E + AT (E2)	E + AG (E3)	E + AC (E4)	E + TA (E5)	E + TT (E6)	E + TC (E7)
M + AA (M1)	M + AA (M1)	M + AA (M1)	M + AA (M1)	M + AA (M1)	M + AA (M1)	M + AA (M1)
M + AT (M2)	M + AT (M2)	M + AT (M2)	M + AT (M2)	M + AT (M2)	M + AT (M2)	M + AT (M2)
M + AC (M3)	M + AC (M3)	M + AC (M3)	M + AC (M3)	M + AC (M3)	M + AC (M3)	M + AC (M3)
M + AG (M4)	M + AG (M4)	M + AG (M4)	M + AG (M4)	M + AG (M4)	M + AG (M4)	M + AG (M4)
M + TA (M5)	M + TA (M5)	M + TA (M5)	M + TA (M5)	M + TA (M5)	M + TA (M5)	M + TA (M5)
M + TT (M6)	M + TT (M6)	M + TT (M6)	M + TT (M6)	M + TT (M6)	M + TT (M6)	M + TT (M6)
M + TC (M7)	M + TC (M7)	M + TC (M7)	M + TC (M7)	M + TC (M7)	M + TC (M7)	M + TC (M7)
M + TG (M8)	M + TG (M8)	M + TG (M8)	M + TG (M8)	M + TG (M8)	M + TG (M8)	M + TG (M8)
M + CA (M9)	M + CA (M9)	M + CA (M9)	M + CA (M9)	M + CA (M9)	M + CA (M9)	M + CA (M9)
M + CT (M10)	M + CT (M10)	M + CT (M10)	M + CT (M10)	M + CT (M10)	M + CT (M10)	M + CT (M10)
M + CC (M11)	M + CC (M11)	M + CC (M11)	M + CC (M11)	M + CC (M11)	M + CC (M11)	M + CC (M11)
M + CG (M12)	M + CG (M12)	M + CG (M12)	M + CG (M12)	M + CG (M12)	M + CG (M12)	M + CG (M12)
M + GA (M13)	M + GA (M13)	M + GA (M13)	M + GA (M13)	M + GA (M13)	M + GA (M13)	M + GA (M13)
M + GT (M14)	M + GT (M14)	M + GT (M14)	M + GT (M14)	M + GT (M14)	M + GT (M14)	M + GT (M14)
M + GC (M15)	M + GC (M15)	M + GC (M15)	M + GC (M15)	M + GC (M15)	M + GC (M15)	M + GC (M15)
M + GG (M16)	M + GG (M16)	M + GG (M16)	M + GG (M16)	M + GG (M16)	M + GG (M16)	M + GG (M16)
E + TG (E8)	E + GT (E10)	E + GC (E11)	E + GG (E12)	E + CT (E14)	E + CC (E15)	E + CG (E16)
M + AA (M1)	M + AA (M1)	M + AA (M1)	M + AA (M1)	M + AA (M1)	M + AA (M1)	M + AA (M1)
M + AT (M2)	M + AT (M2)	M + AT (M2)	M + AT (M2)	M + AT (M2)	M + AT (M2)	M + AT (M2)
M + AC (M3)	M + AC (M3)	M + AC (M3)	M + AC (M3)	M + AC (M3)	M + AC (M3)	M + AC (M3)
M + AG (M4)	M + AG (M4)	M + AG (M4)	M + AG (M4)	M + AG (M4)	M + AG (M4)	M + AG (M4)
M + TA (M5)	M + TA (M5)	M + TA (M5)	M + TA (M5)	M + TA (M5)	M + TA (M5)	M + TA (M5)
M + TT (M6)	M + TT (M6)	M + TT (M6)	M + TT (M6)	M + TT (M6)	M + TT (M6)	M + TT (M6)
M + TC (M7)	M + TC (M7)	M + TC (M7)	M + TC (M7)	M + TC (M7)	M + TC (M7)	M + TC (M7)
M + TG (M8)	M + TG (M8)	M + TG (M8)	M + TG (M8)	M + TG (M8)	M + TG (M8)	M + TG (M8)
M + CA (M9)	M + CA (M9)	M + CA (M9)	M + CA (M9)	M + CA (M9)	M + CA (M9)	M + CA (M9)
M + CT (M10)	M + CT (M10)	M + CT (M10)	M + CT (M10)	M + CT (M10)	M + CT (M10)	M + CT (M10)
M + CC (M11)	M + CC (M11)	M + CC (M11)	M + CC (M11)	M + CC (M11)	M + CC (M11)	M + CC (M11)
M + CG (M12)	M + CG (M12)	M + CG (M12)	M + CG (M12)	M + CG (M12)	M + CG (M12)	M + CG (M12)
M + GA (M13)	M + GA (M13)	M + GA (M13)	M + GA (M13)	M + GA (M13)	M + GA (M13)	M + GA (M13)
M + GT (M14)	M + GT (M14)	M + GT (M14)	M + GT (M14)	M + GT (M14)	M + GT (M14)	M + GT (M14)
M + GC (M15)	M + GC (M15)	M + GC (M15)	M + GC (M15)	M + GC (M15)	M + GC (M15)	M + GC (M15)
M + GG (M16)	M + GG (M16)	M + GG (M16)	M + GG (M16)	M + GG (M16)	M + GG (M16)	M + GG (M16)

The primers were *EcoRI* (E0) and *MseI* (M0) pre-selective primers which two selective nucleotides were added to the 3' end.

**Table A2** Genes, primer sequences, annealing temperature ( $T_m$ ), and number of PCR cycles used in semi-quantitative reverse transcription PCR

Gene	Primers	Sequences (5'→3')	$T_m$ (°C)	PCR cycles
<i>Os03g0661900</i>	661900F	TCTGGGAGTCTTGTCGGTTC	62	25
	661900R	CATGGCAGTGAGGCACTCTA		
<i>Os06g0646400</i>	646400F	TACACCACCCAAATGTCGTG	59	25
	646400R	GCATATTGGACGCTGAGGAT		
<i>Os10g0518200</i>	518200F	TTTTATGGATGAGCACCTGG	59	28
	518200R	GGTGTACTGCCGGATAGCAA		
<i>Os02g0175700</i>	175700F	GAGGAGCACCCAACCCCTTTC	67	32
	175700R	TTGAGAGACAGCCATTGCCA		
<i>Os06g0478600</i>	478600F	CTCAGGCTGCTGTCCATGTC	67	25
	478600R	GGACAGAAGAAGGGACGACG		
<i>Os02g0759700</i>	759700F	CAGGTTCCGGGATGTCAAT	60	28
	759700R	TGCGCTGGCAAAGTAGAGA		
<i>Os07g0627300</i>	627300F	GGCCAAGGATGACGAGCTAT	59	32
	627300R	CGTCCATGCTTTGGCTTGTA		
<i>OS07g0240300</i>	240300F	GATGGGGATAATGGTGGTGG	66	30
	240300R	AACACGCCCAAGAAGACCTG		
<i>Os07g0645100</i>	645100F	AGGGAACGCGAGGACATCTA	62	25
	645100R	TGAAAAGCAAGCTCGGCATA		
<i>Os02g0560450</i>	560450F	GCTGCCACCGACGACATC	65	28
	560450R	TCTTGTCGGAAACAGCGATCT		
<i>Os08g0179900</i>	179900F	ATCACCACCAAAAACACCCCT	65	30
	179900R	AACTCCAGTCGTCCACCTC		
<i>OS05g0392100</i>	392100F	ACCATGGAAGATGGGTGTGC	59	32
	392100R	CCATCATCAGTTGCGTCACA		
<i>Os03g0569000</i>	569000F	CTTGTCTCGCGATTCATCA	65	30
	569000R	TGTGCATTGCCTTCTTGACA		
<i>Os12g0624700</i>	624700F	CGAGATACGCCTACACCTGG	67	28
	624700R	CGTTGCTGGTTGAAGACCAA		
<i>Os11g0210500<sup>o</sup></i>	210500F	ATCAAGGGGAAGCCCATCTT	63	30
	210500R	GTCCACCGTTGGTCATCTCA		
<i>Os05g0536400<sup>o</sup></i>	536400F	CACACCGTTCAATTTCCCAT	55	25
	536400R	TTTCCAGTCAAACCAACATC		
<i>act1 (actin)</i>	actin1F	GAGGCTCTCTCAACCCCAA	55	25
	actin1R	GTGAGATCACGCCCAAGCAAG		

<sup>o</sup>Genes involved in the ethanolic fermentation pathway in rice (Lasanthi-Kudahettige et al., 2007)

## VITA

Patipanee Khanthapok received a Bachelor of Science Degree (Biotechnology) from the Faculty of Engineering and Industrial Technology, Silpakorn University in 2003.

She earned her Master of Science Degree (Biotechnology) from the Faculty of Science, Chulalongkorn University in 2007. Thesis title: "DNA Fingerprint and Chemical Assessment of Selected Tamarind Cultivars with High Laxative Activity"

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### Research publications

#### 1. Submitted manuscripts

1.1 Khanthapok P, Sukrong S, Muangprom A. Identification of ethanol-inducible genes and isolation of the Myb-related protein-like promoter in *Oryza sativa* L. Journal: *Planta*, Date of submission: July 8, 2014.

1.2 Khanthapok P, Muangprom A, Sukrong S. Antioxidant activity and DNA protective properties of rice grass juices. Journal: *ScienceAsia*, Date of submission: June 30, 2014.

#### 2. Conferences

2.1 Khanthapok P, Sukrong S, Muangprom A. Effects of ethanol on growth of rice plants and identification of genes induced by ethanol, The First National Rice Research Conference "Moving Rice Research Towards Innovation", December 15-17, 2010 Kasetsart University Bangken Campus Bangkok, Thailand.

2.2 Pongsamart, S., Sukrong, S., Khanthapok, P., and Bhusawang, P. Combined molecular and chemical assessments of different cultivars of *Tamarindus indica* in Thailand, WOCMAP IV: World Conference on Medicinal and Aromatic Plants, November 9-14, 2008. Cape Town, South Africa.

2.3 Pongsamart S, Sukrong S, Khanthapok P, Bhusawang P. DNA sequence and chemical assessment of thai tamarind cultivars with laxative activity, 7th Joint Meeting of AFERP, ASP, GA, PSE & SIF: Natural Products with Pharmaceutical, Nutraceutical, Cosmetic and Agrochemical Interest, August 3-8, 2008. Athens, Greece.

2.4 Chaipornpokin W, Khanthapok P, Pongsamart S. Determination of organic acids in fresh pulps of Thai tamarind cultivars by HPLC/UV, PBP World Meeting: 6th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, April 7-10, 2008. Barcelona, Spain.

2.5 Khanthapok P, Bhusawang, P, Pongsamart,S. Analysis of organic acids in certain *Tamarindus indica* by reversed-phase high-performance liquid chromatography (RP-HPLC), International Workshop on Medicinal and Aromatic Plants, January 15-18, 2007. Chiang Mai, Thailand.

#### 3. Others

3.1 Sukrong S, Khanthapok P, Pongsamart S. 2008. *Tamarindus indica* chloroplast *rbcl* gene partial sequences for ribulose 1,5-bisphosphate carboxylase/oxygenase large subunit: GenBank accession numbers AB378725, AB378726, AB378727, AB378728, AB378729, AB378730, AB378731, and AB378732. GenBank, National Center for Biotechnology Information Madison, United States of America.

3.2 Pongsamart S, Sukrong S, Khanthapok P, Bhusawang P. 2008. DNA Sequence and Chemical Assessment of Thai Tamarind Cultivars with Laxative Activity. *Planta Med*; 74(9): 1207 (Abstracts).

