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Table S1: Microarray expression data for rice PLDs during developmental stages.

Table S2. Phospholipase D genes in segmental and tandem duplication.

Table S3. *Cis*- regulatory elements in the promoter of *OsPLD* genes

Table S4. List of primers used for real time PCR expression analysis.

Table S1: Microarray expression data for rice PLDs during developmental stages.

Probe Set ID	RGAP Locus	Gene	Leaf	Root	Seedling
Os.155.1.S1_a_at	LOC_Os01g07760	<i>OsPLDα1</i>	6242.175367	5269.7321	3925.633933
OsAffx.4272.1.S1_at	LOC_Os05g07880	<i>OsPLDα2</i>	4.885467467	4.8859167	4.8859167
Os.9878.1.S1_at	LOC_Os06g40190	<i>OsPLDα3</i>	32.34515533	245.8057133	86.64023
Os.50455.1.S1_at	LOC_Os06g40170	<i>OsPLDα4</i>	30.02408167	69.610583	151.44772
Os.50104.1.S1_at	LOC_Os06g40180	<i>OsPLDα5</i>	15.32418467	479.63165	71.06982
Os.54571.2.A1_at	LOC_Os03g27370	<i>OsPLDα6</i>	6.2241519	10.2967936	6.215006033
OsAffx.29446.1.S1_at	LOC_Os08g31060	<i>OsPLDα7</i>	4.8859167	4.8859167	4.8859167
Os.50273.1.S1_at	LOC_Os09g25390	<i>OsPLDα8</i>	5.625645667	5.438678333	5.4247791
Os.9389.2.S1_s_at	LOC_Os10g38060	<i>OsPLDβ1</i>	5.921981233	7.477710633	7.013898933
Os.34954.1.S1_at	LOC_Os03g02740	<i>OsPLDβ2</i>	6.555895033	6.3168688	6.279851333
Os.11408.1.S1_at	LOC_Os09g37100	<i>OsPLDδ1</i>	6.0737009	6.752823367	5.648432733
Os.52881.1.S1_at	LOC_Os03g62410	<i>OsPLDδ2</i>	4.961771967	4.7666548	4.814851833
Os.5744.1.S1_at	LOC_Os07g15680	<i>OsPLDδ3</i>	5.097351367	4.770667233	4.747158767
OsAffx.14869.1.S1_at	LOC_Os05g29050	<i>OsPLDζ1</i>	66.06942333	47.42767333	32.045736
Os.6185.1.S1_at	LOC_Os06g44060	<i>OsPLDϕ</i>	22.93798933	109.5162267	66.52531967
Os.56801.1.S1_at	LOC_Os02g02790	<i>OsPLDκ</i>	7.658374	6.794856333	6.562208433

P1	P2	P3	P4	P5	P6
8216.726467	5704.326167	6257.542133	7620.719567	5049.498667	5664.5192
4.879523667	4.883019267	4.883351133	4.8823817	4.883234467	5.1667771
122.3706883	100.6796817	137.2211917	162.88022	396.6111533	87.77563167
400.43377	273.3897467	1619.810367	935.5627233	203.5852967	1594.2859
1223.395353	435.23476	3160.006833	741.32849	50.04992767	421.2965033
5.849061333	5.865159567	7.363544	17.01129333	14.4064838	6.002412033
4.8859167	4.8859167	4.876525567	4.886024467	4.8808858	4.8859167
5.4492021	5.977885533	5.421123533	5.444078933	15.79280153	271.0026667
10.70430223	7.188466567	9.211326	15.23456633	8.560852667	7.91132
6.4347938	6.8076636	6.4520285	6.8016278	9.998038667	7.610323833
8.155209467	5.212225333	8.836985167	15.53646367	10.61083087	10.70439057
4.77767	4.8364683	4.738279833	4.767397933	4.764099667	4.769329767
5.685199333	4.830766567	4.733914933	4.716392067	5.053959833	7.9616506
35.165629	8.527677433	82.035249	53.09612333	29.000332	237.7374633
51.02877933	39.65344267	56.222913	50.08632533	43.53316767	55.92037233
6.506331567	6.806967133	7.837911733	9.990254133	7.455299667	6.6182728

S1	S2	S3	S4	S5
5965.788	4615.543933	3874.0094	4461.213933	5890.9198
4.878945033	4.878042233	4.8795284	4.8859167	4.883541567
146.41943	89.16045667	48.36223467	32.99898633	30.253009
338.11015	43.871687	65.26046233	13.04123743	7.9226232
91.200898	20.20209917	4.736105967	4.7719552	4.8130933
5.7907314	6.010590833	6.170799833	6.344185833	6.079778667
4.8859167	4.8859167	4.8889467	4.8762434	4.8859167
5.548434667	5.422189867	5.413384933	6.8370115	5.9749213
9.368799	10.21040733	8.948062	7.472738433	7.4958978
6.436263667	6.2115829	6.067419033	6.626155533	6.616352467
5.498324167	5.433400333	5.310419933	6.419083233	6.030744667
4.742399233	4.713208933	4.7425319	4.862373367	5.063719867
5.270414967	4.689629867	4.694068467	4.823346533	4.852945633
173.0901867	71.513911	85.06855333	23.100095	19.14843
44.345235	39.14339233	26.60011633	16.493932	22.76751633
6.355934	6.341891333	6.447524667	6.7472493	6.8691934

Table S2. Phospholipase D genes in segmental and tandem duplication

Segmental Duplication						
S.No.	Locus ID	Gene name	S.No.	Locus ID	Gene name	AA Homology
1	LOC_Os01g07760	<i>OsPLDα1</i>	4	LOC_Os05g07880	<i>OsPLDα2</i>	78%
2	LOC_Os10g38060	<i>OsPLDβ1</i>	5	LOC_Os03g02740	<i>OsPLDβ2</i>	75%
3	LOC_Os05g29050	<i>OsPLDζ1</i>	6	LOC_Os01g20860	<i>OsPLDζ2</i>	74%

Tandem Duplication

S.No.	Locus ID	Gene name	Group	AA Homology
1	LOC_Os06g40190	<i>OsPLDα3</i>		
2	LOC_Os06g40170	<i>OsPLDα4</i>	1	73%
3	LOC_Os06g40180	<i>OsPLDα5</i>		84%

Table S3. Cis- regulatory elements analysis of OsPLD genes for stress and development specific elements using PlantCARE database. Number of various motifs present in 1kb Upsteam promoter region are given.

RGAP Locus	Gene	Cis-regulatory elements							
		ABRE	MBS	Motif IIB	LTR	TC-rich repeats	Skn-1	GCN4	RY-element
LOC_Os01g07760	<i>OsPLDα1</i>	3	2	1			2		
LOC_Os05g07880	<i>OsPLDα2</i>	1			1				
LOC_Os06g40190	<i>OsPLDα3</i>	1				1			
LOC_Os06g40170	<i>OsPLDα4</i>	1					1	1	
LOC_Os06g40180	<i>OsPLDα5</i>	2	1		1		2		
LOC_Os03g27370	<i>OsPLDα6</i>	1	2			1	2		
LOC_Os08g31060	<i>OsPLDα7</i>					2	2		
LOC_Os09g25390	<i>OsPLDα8</i>		1		1	1	2		
LOC_Os10g38060	<i>OsPLDβ1</i>	3	1	1			2		
LOC_Os03g02740	<i>OsPLDβ2</i>	2					1		
LOC_Os09g37100	<i>OsPLDδ1</i>	1	2	2				1	
LOC_Os03g62410	<i>OsPLDδ2</i>		1		1	2	3	1	
LOC_Os07g15680	<i>OsPLDδ3</i>					3	1	1	1
LOC_Os05g29050	<i>OsPLDζ1</i>	5	1				2	1	
LOC_Os01g20860	<i>OsPLDζ2</i>	3		1	1		1		
LOC_Os06g44060	<i>OsPLDϕ</i>	2	1		1		1		
LOC_Os02g02790	<i>OsPLDκ</i>	1						1	2

TableS4 . List of primers used for real time PCR expression analysis

Gene ID	Primer sequence
<i>OsPLDα1F</i>	5'TCCAAGCCAAGGGAATTGAA3'
<i>OsPLDα1R</i>	5'CTCACGGTTACCCAAGCAGAA3'
<i>OsPLDα4F</i>	5'CGG CCG AGA CTC GGA GAT3'
<i>OsPLDα4R</i>	5'CCA TGG ATT TGA CCT CTT GCA3'
<i>OsPLDα5F</i>	5'GCC ATT CCT GCA CAC TGC TA3'
<i>OsPLDα5R</i>	5'CCG GAG ATA GAT TAC ATT GCT TGA3'
<i>OsPLDα6F</i>	5'CGCCATCCTCACCACAT3'
<i>OsPLDα6R</i>	5'CACTCAGCAAGCACAGCATGA3'
<i>OsPLDδ1F</i>	5'CCA GCT GCG TAT GAT GTC TTG3'
<i>OsPLDδ1R</i>	5'ATC GTT CAC GCC ATT TCG TT3'
<i>OsPLDζ1F</i>	5'TGC GCA CAA ACT TTC AGA TGT3'
<i>OsPLDζ1R</i>	5'TCC CAG GAA TTT GGC TCA GA3'
<i>OsPLDϕF</i>	5'CGG AGT GAG CTG GAC AGT TG3'
<i>OsPLDϕR</i>	5'TCC TAA TGT TGT TGA TGC ATG TGA3'
<i>Actin-F</i>	5' CAG CCA CAC TGT CCC CAT CTA 3'
<i>Actin-R</i>	5' AGC AAG GTC GAG ACG AAG GA 3'