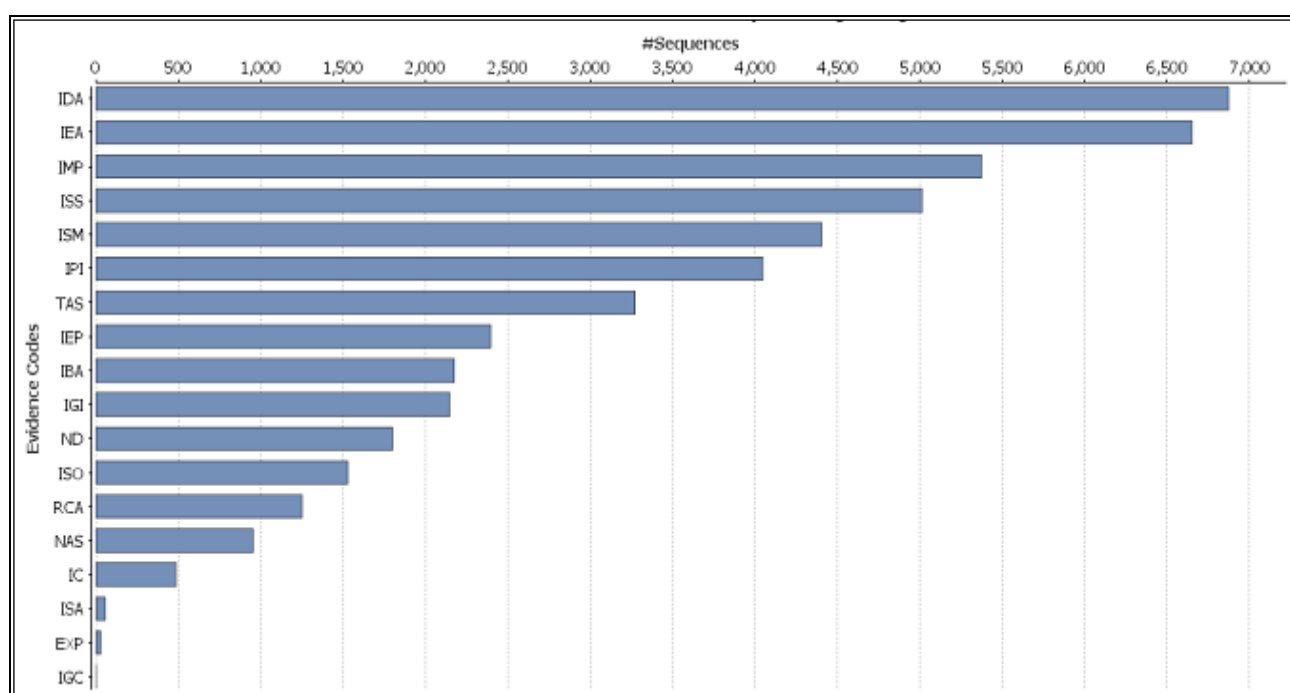
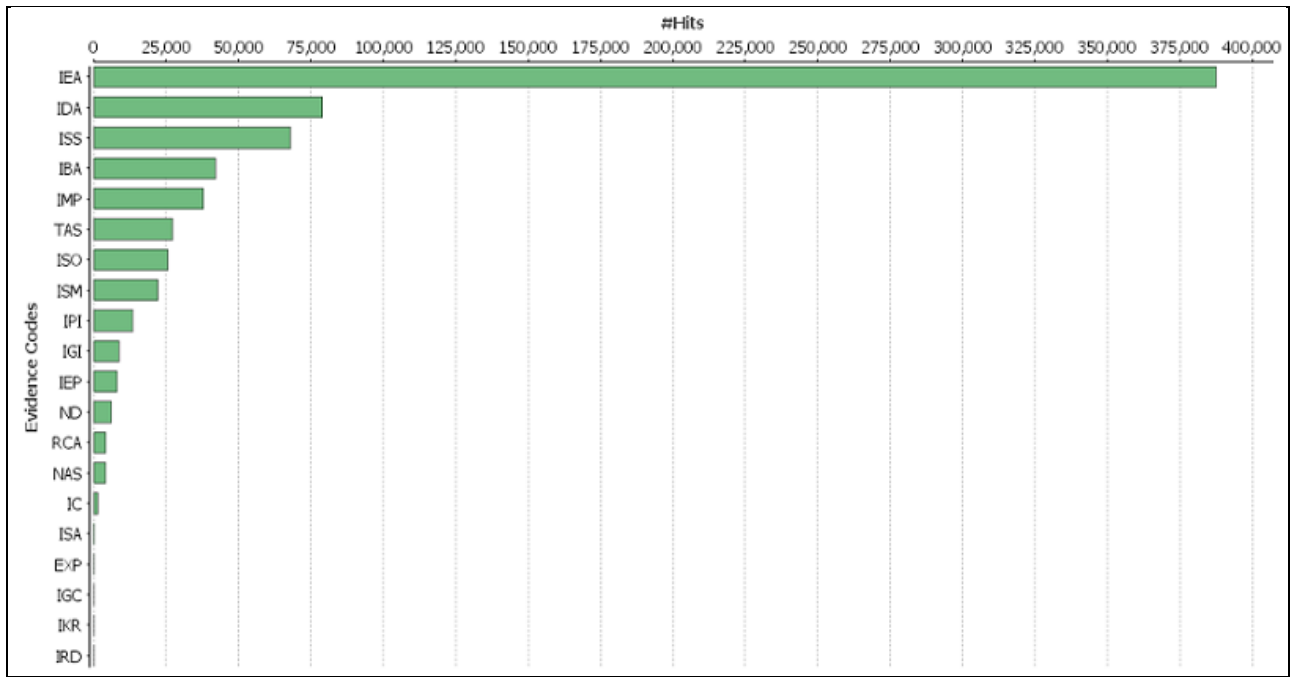


Mechanistic insights into longan (*Dimocarpous longan Lour.*) transcriptome for physiological characterization for defensive genes and differential gene expression analysis with longan embryogenic callus transcriptome

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Supplementary material**Supplementary figures:****Suppl. Fig. 1:** Distribution of evidence codes with putative transcripts.



Suppl. Fig. 2: Distribution of evidence codes with Blast hits against contig sequences.

Suppl. Table 1: Defence response proteins found in lonagn transcriptome and contigs associated with their formation respectively.

Sr. no.	Protein name and description	Source of similarity found	Specific Domain	GENE name	Related Contig	Reference
1.	NBS46 disease resistant protein	<i>A.thaliana, C.sinensis, D.longan</i>	NB-ARC	RPP-13	226	Eddy et al. 2000
2.	Putative Nematode resistant protein	<i>A.thaliana, C.sinensis</i>	Hs1pro	At2G40000	458	Murray et al. 2007
3.	Probably inactive LRR receptor like protein kinase IMK2	<i>A.thaliana, C. sinensis</i>	LRR	IMK2	1011	Gou et al. 2010
4.	Heat Shock Protein (HSP70)	<i>A.thaliana, C. sinensis</i>	HSP A like	HSP70	1388	Sung et al. 2001
5.	Predicted- TMV resistant Protein N like	<i>A.thaliana, C. sinensis</i>	TIR-NBS-LRR	F24J7.70	1759	Xu et al. 2013
6.	Disease resistant protein (NBS44) putative ADR 1 like	<i>A.thaliana, D. longan</i>	NBS-LRR	ADR-1 like	2052	Ye et al. 2014
7.	Predicted- putative DRP	<i>A.thaliana, Tarenaya hassleriana</i>	LRR, NB-ARC	At3g14460	2115	Meyers et al. 2003
8.	Cystine and histidine rich domain containing protein RAR1	<i>Oryza sativa, A. thaliana</i>	Zn2+	RAR1	3065	Shirasu et al. 1999
9.	Disease resistant protein (NBS46)	<i>A.thaliana, D. Longan</i>	NBS-LRR	RPP39	3274	Ye et al. 2014
10.	HSP 70 Interacting Protein 1	<i>A.thaliana</i>	NBD/STI1/TPR repeat	-	3596	Alexandrov et al. 2006
11.	Predicted- Disease resistant protein, RPS2 like	<i>A.thaliana, C. sinensis</i>	NB-ARC	At4627190	4249	van der Biezen and Jones 1998
12.	HSP90 like protein GRP94	<i>A.thaliana, Coffea canephora</i>	PRK05218	HSP90	4260	Marzec et al. 2012
13.	Disease resistant protein	<i>A.thaliana, C. sinensis</i>	TIR-NBS-LRR	At2g16870	4484	Lin et al. 1999
14.	Multidrug resistance associated protein 5 isoform 1(subfamily C)	<i>A.thaliana</i>	ABCC-MRP domain 1	F20D22.11	4669	Glavinas et al. 2004
15.	ABA response element factor	<i>Zea mays, A.thaliana, C. sinensis</i>	Basic Leucine Zipper	ABI5	4971	Liao et al. 2008
16.	Disease resistant protein	<i>A.thaliana</i>	TIR-NBS-LRR	At1G63880	5714	Tabata et al. 2000
17.	Hypersensitive disease resistant protein	<i>A.thaliana</i>	PHB/SPFH	HIR1	6132	Zhou et al. 2010
18.	DRP (TIR-NBS-LRR) family	<i>A.thaliana</i>	TIR-NBS-LRR	AT5G45060	6371	Tabata et al. 2000
19.	NBS44 (ADR 1 like 1)	<i>D. Longan</i>	NBS-LRR	ADR1-L1	6850	Yang et al. 2016

20.	RPP39	<i>A.thaliana</i>	CC-NBS-LRR	RPP39	7005	Goritschnig et al. 2012
21.	Disease Resistant Protein	<i>A.thaliana, Theobroma cacao</i>	LRR/ NB-ARC	AT3G14460	7158	Salanoubat et al. 2000
22.	NBS54	<i>A.thaliana and D. Longan</i>	NBS-LRR	NBS54	7194	Yang et al. 2016
23.	Probable disease resistant protein	<i>C. Sinensis, Glycine Max</i>	NBS/ LRR	At4g27220	7648	Mayer et al. 1999
24.	Enhanced disease resistant 1 protein	<i>A.thaliana, C.sinensis</i>	STKC- MAP3K-like	EDR1	8071	Xu et al. 2013
25.	NBS39	<i>A.thaliana and D. Longan</i>	NBS-LRR	-	8096	Yang et al. 2016
26.	Molecular Cheperone HSP 40/ DNAJ like protein	<i>A.thaliana</i>	PRK14293	DNAJ7	8165	Chiu et al. 2013
27.	AC011620_7 putative disease resistant protein	<i>A.thaliana</i>	LRR	At3G05260	8232	Salanoubat et al. 2000
28.	NBS52	<i>A.thaliana and D.longan</i>	NBS-LRR	At5g63020	8282	Sato et al. 1998
29.	Protein FAR-RED IMPAIRED response 1 protein	<i>A.thaliana</i>	MULE transposase domain	LOC102625461	8295	Lopez et al. 2012
30.	TMV resistant protein N like	<i>A.thaliana, C.sinensis</i>	TIR-NBS-LRR	At4g12010	8450	Mayer et al. 1999
31.	Protein FAR-RED IMPAIRED response 1 protein	<i>A.thaliana, C.sinensis</i>	MULE transposase domain	LOC102621332	8823	Lopez et al. 2012
32.	Disease resistant family protein	<i>C.sinensis</i>	LRR	At2g34930	9047	Kobe and Kajava 2001
33.	Multidrug resistance protein	<i>A.thaliana</i>	Md1B	At1g04120	9150	Badri et al. 2012

Suppl. Table 2: Evidence code qualifiers and their abbreviations associated with each GO term provided by Blast2GO annotation of transcripts.

Sr. No.	Evidence codes	Abbreviations
<i>Experimental evidence codes</i>		
1.	Inferred from Experiment	EXP
2.	Inferred from Direct Assay	IDA
3.	Inferred from Physical Interaction	IPI
4.	Inferred from Mutant Phenotype	IMP
5.	Inferred from Genetic Interaction	IGI
6.	Inferred from Expression Pattern	IEP
<i>Computational analysis evidence codes</i>		
1.	Inferred from Sequence or structural Similarity	ISS
	Inferred from Sequence Orthology	ISO
	Inferred from Sequence Alignment	ISA
	Inferred from Sequence Model	ISM
	Inferred from Genomic Context	IGC
	Inferred from Biological aspect of Ancestor	IBA
	Inferred from Biological aspect of Descendant	IBD
	Inferred from Key Residues	IKR
	Inferred from Rapid Divergence	IRD
	Inferred from Reviewed Computational Analysis	RCA
<i>Author statement evidence codes</i>		
1.	Non-traceable Author Statement	NAS
2.	Traceable Author Statement	TAS
<i>Curatorial statement codes</i>		
1.	Inferred by Curator	IC
2.	No biological Data available	ND
<i>Automatically assigned evidence codes</i>		
1.	Inferred from Electronic Annotation	IEA