

Genetically modified crops are superior in their nitrogen use efficiency-A meta-analysis of three major cereals

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Supplementary Table 7. Gene categories involved in the collected studies

Gene name	Description	Category
<i>Bt</i>	Bt protein	Biotic-stress related Protein (BSRP)
<i>Bar</i>	Herbicide resistance gene	
<i>BjNPR1</i>	Pathogenesis-related genes 1	
<i>PcGDH</i>	Fungi NADP(H)-dependent GDH	
<i>ZmPti1-1</i>	Serine/threonine kinase The enzyme that mobilizes photoassimilated sucrose into numerous reactions of the developing plant seeds, associated with grain yield	
<i>Incw2</i>	DEAD-box helicase	
<i>PDH45</i>	Sucrose non-fermenting 1-related kinase	
<i>SAPK9</i>	Phosphoenolpyruvate carboxylase	
<i>PEPC/PPDK</i>	Phytase	
<i>appA</i>	Vacuolar H ⁺ -pyrophosphatase	
<i>AVP1</i>	Phospholipase D	
<i>PLD</i>	V-H ⁺ Ppase	
<i>VP</i>	Leucine-rich repeat receptor-like kinase	
<i>LRK1</i>	Gibberellin 2-oxidase	
<i>AtGA2ox8</i>	S-domain receptor-like kinase extracellular domain, involved in the self-incompatibility response	
<i>SRK</i>	Alanine amino transferase	
<i>AlaAt</i>	Asparagine synthetase	
<i>ASN</i>	Cytosolic glutamine synthetase isoenzymes	
<i>GSI</i>	CBL-Interacting Kinase	
<i>ZmCIPK21</i>	Glyceral-Dehyde-3-phosphate dehydrogenase	
<i>PsGPD</i>	Sucrose on-fermenting-1-related protein kinase	
<i>SnRK</i>	Mitochondrial malate dehydrogenase	
<i>MDH</i>	GA biosynthesis	
<i>GA20-OXIDASE1</i>	Arabidopsis vacuolar H ⁺ -pyrophosphatase	
<i>AVP1</i>	Trehalose-6-phosphate phosphatase	
<i>TPP</i>	Vacuolar H ⁺ -pyrophosphatase	
<i>TsVP</i>	Gamma-glutamylcysteine	

	synthetase	
<i>LOS5</i>	Molybdenum cofactor sulfurase	
<i>Cu/Zn-SOD+APX</i>	Superoxide dismutase/ascorbate peroxidase	
	A	
	vacuolar H ⁺	
<i>SaVHAC1</i>	-ATPase subunit c1 gene from the halophyte grass <i>Spartina alterniflora</i> Loisel	
<i>SARK9</i>	Sucrose non-fermenting 1-related kinase 2 gene	
<i>OsACS2</i>	1-aminocyclopropane-1-carboxylic acid synthase	
<i>OsCPK4</i>	Calcium-dependent protein kinase	
<i>OsHsFA2D</i>	Heat Shock transcription factor	
<i>TsCBF1</i>	C-repeat-binding transcription factor	
<i>NAC5, 6, 9, 67, 69</i>	NAC transcription factor	
<i>AP37, 59</i>	Transcription factor	
<i>ZmDOF1</i>	DOF transcription factor	
<i>OsMYB55</i>	MYB transcription factor	
<i>CCAAT Box-Binding Transcription Factor</i>	CCAAT Box-Binding transcription Factor	Transcription factor (TF)
<i>OsPTF1</i>	Transcription factor	
	Encodes a member of the DREB subfamily A-1 of ERF/AP2 transcription factor family (CBF3)	
<i>DHHC-type</i>	DHHC-type zinc finger protein	
<i>Ossta2</i>	Oryza sativa salt tolerance activation 2-Dominant	
<i>W16</i>	AP2/EREBP transcription factor	
<i>DHHC</i>	Zinc-finger protein	
<i>OsHAK1</i>	High-affinity potassium transporter	
<i>NAT3</i>	A nitrate transporter of <i>cylindrotheca fusiformis</i>	
<i>OsPTR6</i>	Nitrate transporter	
<i>STP13</i>	Hexose transporter	Transporter
<i>ApKUP3</i>	High-affinity potassium transporters	
<i>PHO1</i>	Pi transporter	
<i>PgNHX1</i>	<i>Pennisetum glaucum</i> vacuolar Na ⁺ /H ⁺ antiporter gene	

<i>nhaA</i>	Na ⁺ /H ⁺ antiporter	
<i>HvSUT1</i>	Sucrose transporter	
<i>OsNRT2.3b/OsNPF7.3/OsNRT1.1A.OsNPF6.3/OsNRT2.1/OsNPF7.9/OsNRT1.2</i>	Nitrate transporter	
<i>OsAMT1-1</i>	Ammonium transporter	
<i>HVA1</i>	Late embryogenesis abundant protein	
<i>AISAP</i>	Stress associated protein	
<i>OsEOD93-1</i>	Nitrogen-responsive early nodulin gene	
<i>Tin</i>	Tiller inhibition gene	
<i>OCP11</i>	Stress responsive proteinase inhibitor gene	
<i>Bn-csRRM2</i>	A conserved RNA-binding motif (RRM) domain, flowering control locus A (FCA) protein	
<i>TaPHR1</i>	A phosphate starvation response regulator	
<i>LEA</i>	Late embryogenesis abundant	
<i>SeCspA</i>	Synthetic bacterial cold shock protein gene	
<i>TOND1</i>	Tolerance of nitrogen deficiency	
<i>OsPIN2</i>	Efflux-facilitating PIN-FORMED	
<i>TaMIR1129</i>	miRNA	Other genes
<i>OsDhn1</i>	Dehydrin gene	
<i>OsCam1-1</i>	Salt-inducible calmodulin gene	
<i>RAA1</i>	Root architecture associated 1	
<i>MoSM1</i>	Immunity-inducing protein	
<i>SaARF1</i>	ADP ribosylation factor	
<i>RPL23A</i>	Ribosomal protein large	
<i>PgRab7</i>	Vesicle trafficking protein	
<i>AtGRP2</i>	Glycine-rich RNA-binding protein	
<i>SeCspA</i>	Synthetic bacterial cold shock protein	
<i>U</i>	Unknown genes	
<i>EhEMI</i>	Em-like protein from Eutrema halophilum	
<i>OsENOD93-1</i>	A nitrogen-responsive early nodulin	

<i>OsPGIP1</i>	gene Polygalacturonase-inhibiting proteins
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