

Table S4: Gene Ontologies (GO) for AR23.1 and P40/1 cassava genotypes following mealybug infestation categorized in Biological process, Molecular function and Cellular component.

GO term	Gene ID	GO ID	Gene annotation
Biological process			UDP-Glycosyltransferase superfamily protein
1. Metabolic process	Manes.02G054300	GO:0016758,GO:0008152	cytochrome P450, family 77, subfamily A, polypeptide 5 pseudogene
	Manes.02G071200	GO:0008152,GO:0003824	Terpenoid cyclases/Protein
	Manes.02G086200	GO:0016829,GO:0010333,GO:0008152,GO:0000287	prenyltransferases superfamily protein
	Manes.12G076600	GO:0016829,GO:0010333,GO:0008152,GO:0000287	Terpene synthase 10
	Manes.16G016100	GO:0016829,GO:0010333,GO:0008152,GO:0000287	Terpene synthase 14
	Manes.S099100	GO:0016829,GO:0010333,GO:0008152,GO:0000287	Terpene synthase-like sequence-1,8-cineole
	Manes.01G231100	GO:0055114,GO:0016491	Tibberellin 2-oxidase 6
	Manes.01G274900	GO:0055114,GO:0016491,GO:0006633,GO:0005506	Fatty acid hydroxylase superfamily
	Manes.03G032500	GO:0055114,GO:0016491	ACC oxidase 1
	Manes.04G120100	GO:0055114,GO:0016491	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
	Manes.08G002700	GO:0055114,GO:0020037,GO:0006979,GO:0004601	Tscorbate peroxidase 2
	Manes.10G071700	GO:0055114,GO:0020037,GO:0051536,GO:0020037	Titrite reductase 1
	Manes.10G146700	GO:0055114,GO:0020037,GO:0016705,GO:0005506	Tytochrome P450, family 705, subfamily A, polypeptide 27
	Manes.14G051800	GO:0055114,GO:0020037,GO:0016705,GO:0005506	Tytochrome P450, family 94, subfamily B, polypeptide 3
	Manes.15G121600	GO:0055114,GO:0016491	Tibberellin 2-oxidase
	Manes.S113100	GO:0045156,GO:0019684,GO:0009772	Thotosystem II reaction center protein A
	Manes.01G110800	GO:0008270,GO:0005975,GO:0004476,GO:0009298	Mannose-6-phosphate isomerase, type I
	Manes.S113700	GO:0016984,GO:0015977,GO:0000287	Tibulose-bisphosphate carboxylases
	Manes.01G192100	GO:0045454,GO:0015035,GO:0006662	Thioredoxin H-type 7
	Manes.02G212800	GO:0006529,GO:0004066	Glutamine-dependent asparagine synthase 1

	Manes.01G242300	GO:0043565,GO:0006355,GO:0003700,GO:0003677	Homeobox 7 Integrase-type DNA-binding superfamily protein
	Manes.03G044100	GO:0006355,GO:0003700	Ethylene responsive element binding factor 1
	Manes.06G131100	GO:0006355,GO:0003700 GO:0008270,GO:0006355,GO:0005634,GO:0004402,GO:0003712,GO:0005515	BTB and TAZ domain protein 4 mRNA splicing factor, thioredoxin-like U5 snRNP
2. Cellular process	Manes.03G120700	:0000398	C-repeat-binding factor 4
	Manes.01G067400	GO:0006355,GO:0003700	Ethylene responsive element binding factor 1
	Manes.01G085400	GO:0006355,GO:0003700	NAC domain containing protein 42
	Manes.02G089000	GO:0006355,GO:0003677	Integrase-type DNA-binding superfamily protein
	Manes.03G056100	GO:0006355,GO:0003700	Ethylene responsive element binding factor 1
	Manes.06G131100	GO:0006355,GO:0003700 GO:0008270,GO:0006355,GO:0005634,GO:0004402,GO:0003712,GO:0005515	BTB and TAZ domain protein 4 Integrase-type DNA-binding superfamily protein
	Manes.13G112500	03712,GO:0005515	Integrase-type DNA-binding superfamily protein
	Manes.03G044100	GO:0006355,GO:0003700 GO:0045454,GO:0015035,GO:0009055	Glutaredoxin family protein D-mannose binding lectin protein with Apple-like carbohydrate-binding domain
	Manes.15G015600	:0009055	Cytochrome C assembly protein
	Manes.15G094100	GO:0048544	ATP binding microtubule motor family protein
3. Response to stress	Manes.07G086000	GO:0020037,GO:0017004 GO:0008017,GO:0007018,GO:0005524,GO:0003777,GO:0005871	Late embryogenesis abundant 3 (LEA3) family protein
	Manes.05G132500	05871	Peroxidase superfamily protein
	Manes.05G061300	GO:0006950 GO:0055114,GO:0020037,GO:0006979,GO:0004601	Peroxidase superfamily protein
	Manes.01G065500	:0006979,GO:0004601 GO:0055114,GO:0020037,GO:0006979,GO:0004601	Peroxidase superfamily protein
	Manes.02G025800	:0006979,GO:0004601 GO:0055114,GO:0020037,GO:0006979,GO:0004601	Peroxidase superfamily protein
	Manes.02G026300	:0006979,GO:0004601 GO:0055114,GO:0020037,GO:0006979,GO:0004601	Escorbate peroxidase 2
	Manes.08G002700	:0006979,GO:0004601	P-loop containing nucleoside
	Manes.02G015400	GO:0009378,GO:0006310,GO	

	:0006281	triphosphate hydrolases superfamily protein
	GO:0030983,GO:0006298,GO	
Manes.01G020600	:0005524	MUTS homolog 2
	GO:0030983,GO:0006298,GO	
Manes.01G082400	:0005524	MUTS-like protein 4
		Seven transmembrane MLO family protein
Manes.02G106500	GO:0016021,GO:0006952	
		Polyketide cyclase/dehydrase and lipid transport superfamily protein
Manes.15G130200	GO:0009607,GO:0006952	
Manes.15G130300	GO:0009607,GO:0006952	MLP-like protein 43
		Seven transmembrane MLO family protein
Manes.13G141100	GO:0016021,GO:0006952	
Manes.15G130000	GO:0009607,GO:0006952	MLP-like protein 28
Manes.17G079800	GO:0009607,GO:0006952	MLP-like protein 28
Manes.08G135200	GO:0050832,GO:0042742	Pathogenesis-related 4
	GO:0008061,GO:0050832,GO	
Manes.08G135300	:0042742	Pathogenesis-related 4
Molecular function		Phytochrome P450, family 77, subfamily
1. Catalytic activity		A, polypeptide 5 pseudogene
Manes.02G071200	GO:0008152,GO:0003824	
	GO:0003824,GO:0006470,GO	
Manes.02G128000	:0004722	Highly ABA-induced PP2C gene 3
Manes.17G070900	GO:0003824	Camelliol C synthase 1
	GO:0016829,GO:0010333,GO	
Manes.08G138500	:0000287	Terpene synthase 21
	GO:0016829,GO:0010333,GO	
Manes.12G076600	:0008152,GO:0000287	Terpene synthase 10
	GO:0016829,GO:0010333,GO	
Manes.16G016100	:0008152,GO:0000287	Terpene synthase 14
	GO:0016984,GO:0015977,GO	
Manes.S113700	:0000287	Ribulose-bisphosphate carboxylases
Manes.17G116800	GO:0008270,GO:0004089	Carbonic anhydrase 1
	GO:0016829,GO:0010333,GO	terpene synthase-like sequence-1,8-
Manes.S099100	:0008152,GO:0000287	cineole
	GO:0016887,GO:0005524,GO	
Manes.03G018600	:0016020	Pleiotropic drug resistance 12
		Eukaryotic aspartyl protease family protein
Manes.02G039000	GO:0006508,GO:0004190	
		Eukaryotic aspartyl protease family protein
Manes.02G145900	GO:0006508,GO:0004190	
		Eukaryotic aspartyl protease family protein
Manes.16G132600	GO:0006508,GO:0004190	
Manes.07G059300	GO:0005975,GO:0004553	Glycosyl hydrolase superfamily protein
Manes.01G076500	GO:0004575,GO:0004564	Glycosyl hydrolases family 32 protein

		GO:0042545,GO:0030599,GO	
2. Binding	Manes.01G231200	:0005618	Pectin lyase-like superfamily protein
		GO:0008270,GO:0005975,GO	
	Manes.01G110800	:0004476,GO:0009298	Mannose-6-phosphate isomerase, type I
		GO:0008270,GO:0006355,GO	
		:0005634,GO:0004402,GO:00	
	Manes.13G112500	03712,GO:0005515	BTB and TAZ domain protein 4
		GO:0006468,GO:0005524,GO	
	Manes.01G013000	:0004672	Wall-associated kinase family protein
		GO:0030983,GO:0006298,GO	
	Manes.01G020600	:0005524	MUTS homolog 2
		GO:0006355,GO:0005634,GO	
		:0005524,GO:0032502,GO:00	
	Manes.01G070800	06351	Growth-regulating factor 2
		GO:0005509,GO:0006468,GO	
	Manes.02G170200	:0005524,GO:0004672	Wall associated kinase 3
			Protein kinase protein with adenine
		GO:0006468,GO:0005524,GO	nucleotide alpha hydrolases-like
	Manes.02G172500	:0004672	domain
		GO:0016887,GO:0005524,GO	
	Manes.03G018600	:0016020	Pleiotropic drug resistance 12
			protein serine/threonine kinases;protein
		GO:0006468,GO:0005524,GO	Kinases;ATP binding;sugar
	Manes.03G076800	:0004672	binding;kinases;carbohydrate binding
		GO:0008017,GO:0007018,GO	
		:0005524,GO:0003777,GO:00	ATP binding microtubule motor family
	Manes.05G132500	05871	protein
		GO:0016887,GO:0005524,GO	
	Manes.06G154000	:0016020	ABC-2 type transporter family protein
		GO:0016887,GO:0005524,GO	White-brown complex homolog protein
	Manes.10G105100	:0016020	11
			Integrase-type DNA-binding
	Manes.03G056100	GO:0006355,GO:0003700	superfamily protein
			Ethylene responsive element binding
	Manes.06G131100	GO:0006355,GO:0003700	factor 1
		GO:0016829,GO:0010333,GO	
	Manes.08G138500	:0000287	Terpene synthase 21
		GO:0016829,GO:0010333,GO	
	Manes.12G076600	:0008152,GO:0000287	Terpene synthase 10
		GO:0016829,GO:0010333,GO	
	Manes.16G016100	:0008152,GO:0000287	Terpene synthase 14
		GO:0016829,GO:0010333,GO	Terpene synthase-like sequence-1,8-
	Manes.S099100	:0008152,GO:0000287	cineole
	Manes.S113700	GO:0016984,GO:0015977,GO	Ribulose-bisphosphate carboxylases

		:0000287	
	Manes.10G146700	GO:0055114,GO:0020037,GO:0016705,GO:0005506	Cytochrome P450, family 705, subfamily A, polypeptide 27
	Manes.14G051800	GO:0055114,GO:0020037,GO:0016705,GO:0005506	Cytochrome P450, family 94, subfamily B, polypeptide 3
	Manes.08G002700	GO:0055114,GO:0020037,GO:0006979,GO:0004601	Ascorbate peroxidase 2
	Manes.17G098200	GO:0020037,GO:0019825	Hemoglobin 1
Cellular component		GO:0008270,GO:0006355,GO:0005634,GO:0004402,GO:0003712,GO:0005515	
1. Cell	Manes.13G112500	GO:0005515	BTB and TAZ domain protein 4
	Manes.14G006300	GO:0005515	CCT motif family protein
	Manes.14G096200	GO:0005515	RNI-like superfamily protein
	Manes.03G066400	GO:0016021,GO:0015116,GO:0008272,GO:0055085,GO:0016020,GO:0008271,GO:1902358	Sulfate transporter 3;5
	Manes.04G094700	GO:0071805,GO:0016020,GO:0015079	K ⁺ uptake transporter 3
	Manes.06G154000	GO:0016887,GO:0005524,GO:0016020	ABC-2 type transporter family protein
	Manes.09G062300	GO:0016020,GO:0006810,GO:0005215	Gamma tonoplast intrinsic protein
	Manes.10G105100	GO:0016887,GO:0005524,GO:0016020	white-brown complex homolog protein 11
	Manes.01G086900	GO:0055085,GO:0016021	Major facilitator superfamily protein
	Manes.01G161800	GO:0055085,GO:0016021	Cation exchanger 3
	Manes.02G040000	GO:0016021,GO:0016020,GO:0022857	Nodulin MtN21 /EamA-like transporter family protein
	Manes.02G106500	GO:0016021,GO:0006952	Seven transmembrane MLO family protein
	Manes.13G112500	GO:0008270,GO:0006355,GO:0005634,GO:0004402,GO:0003712,GO:0005515	BTB and TAZ domain protein 4
2. Cell part	Manes.05G132500	GO:0008017,GO:0007018,GO:0005524,GO:0003777,GO:0005871	ATP binding microtubule motor family protein
	Manes.03G120700	GO:0045454,GO:0005681,GO:0000398	mRNA splicing factor, thioredoxin-like U5 snRNP
	Manes.02G039500	GO:0042545,GO:0030599,GO:0005618	Pectin lyase-like superfamily protein
	Manes.01G067000	GO:0055085,GO:0016020,GO:0015297,GO:0015238,GO:0006855	MATE efflux family protein

Manes.01G108600	GO:0016020	Uncharacterized protein family (UPF0016)
Manes.01G254100	GO:0016757,GO:0016020 GO:0055085,GO:0016020,GO:0015297,GO:0015238,GO:006855	Protein of unknown function (DUF604)
Manes.02G032300	GO:0016021,GO:0016020,GO:0022857	MATE efflux family protein
Manes.02G040000	GO:0055085,GO:0016020,GO:0006811,GO:0005216	Nodulin MtN21 /EamA-like transporter family protein
Manes.02G051000	GO:0033177,GO:0015991,GO:0015078	Cyclic nucleotide-regulated ion channel family protein
Manes.S091000	GO:0055085,GO:0016020,GO:0006811,GO:0005216	ATP synthase subunit C family protein
Manes.02G051100	GO:0008270,GO:0006355,GO:0005634,GO:0004402,GO:003712,GO:0005515	Cyclic nucleotide-regulated ion channel family protein
Manes.13G112500	GO:0045454,GO:0005681,GO:0000398	BTB and TAZ domain protein 4
Manes.03G120700	GO:0008017,GO:0007018,GO:0005524,GO:0003777,GO:0005871	mRNA splicing factor, thioredoxin-like U5 snRNP
Manes.05G132500	GO:0042545,GO:0030599,GO:0005618	ATP binding microtubule motor family protein
Manes.02G039500		Pectin lyase-like superfamily protein
