

Table S1. The significantly changed TFs that overlapped in the three OTA-inducing conditions (YEA, YES, YEG) compared to non-inducing condition (YEP).

Gene_ID	Family	Description	SGD	Description
Up-regulated				
An15g00120	C2H2	C2H2 transcription factor	<i>azf1</i>	Regulates expression of genes involved in carbon metabolism, energy production, cell wall organization and cell cycle
An08g10980	ZnCys	hypothetical protein ANI_1_2502074	<i>asg1</i>	Regulator involved in the stress response, utilization of fatty acids and accumulation of lipids
An01g13080	ZnCys	C6 transcription factor	<i>asg1</i>	Regulator involved in the stress response, utilization of fatty acids and accumulation of lipids
An04g04490	ZnCys	hypothetical protein ANI_1_1838184	<i>put3</i>	Regulates proline utilization genes
An15g05100	ZnCys	C6 transcription factor	<i>ecm22</i>	Regulates transcription of sterol biosynthetic genes
An15g05310	ZnCys	C6 zinc finger domain protein	<i>upc2</i>	Regulates transcription of sterol biosynthetic genes
An18g00320	ZnCys	Zn(II)2Cys6 transcription factor	<i>upc2</i>	Regulates transcription of sterol biosynthetic genes
An04g08080	ZnCys	C6 transcription factor	<i>rgt1</i>	Regulates expression of several <i>HXT</i> genes in response to glucose
An12g06190	ZnCys	Zn(II)2Cys6 transcription factor	<i>stb4</i>	Regulates expression of genes encoding transporters
An18g00850	NEG	hypothetical protein ANI_1_1016164	YKL070W	unknown function
An08g11000	ZnCys	hypothetical protein An08g11000	/	/
An15g05080	ZnCys	hypothetical protein ANI_1_1562134	/	/
An13g03030	ZnCys	hypothetical protein ANI_1_762114	/	/
An01g11310	ZnCys	hypothetical protein ANI_1_3052014	/	/
An11g00290	ZnCys	hypothetical protein ANI_1_1536094	/	/
An13g01420	ZnCys	C6 transcription factor	/	/
An14g05790	ZnCys	C6 transcription factor	/	/
An04g09790	ZnCys	fungal specific transcription factor	/	/
An09g01870	ZnCys	fungal specific transcription factor	/	/

		domain protein		
An08g03770	ZnCys	C6 zinc finger domain protein	/	/
An17g00650	ZnCys	Zn(II)2Cys6 transcription factor	/	/
An07g08880	bZIP	bZIP transcription factor	/	/
An13g03530	HOMEOLIKE	transposase	/	/
An12g07000	HOMEOLIKE	transposase	/	/
An12g04610	OBFOLD	endoglucanase-4	/	/
An18g00850	NEG	hypothetical protein ANI_1_1016164	/	/
Down-regulated				
An12g10230	bZIP	hypothetical protein ANI_1_2318104	<i>aca1</i>	Important for carbon source utilization
An09g02620	ZnCys	unnamed protein product	<i>gal4</i>	Activating GAL genes
An12g00840	ZnCys	unnamed protein product	<i>gal4</i>	Activating GAL genes
An01g10540	C2H2	regulatory protein BrLA	<i>msn4</i>	Regulator involved in the stress response
An01g02050	ZnCys	unnamed protein product	<i>asg1</i>	Regulator involved in the stress response; regulates utilization of fatty acids and accumulation of lipids
An11g02150	ZnCys	unnamed protein product	<i>aro80</i>	Activates transcription of aromatic amino acid catabolic genes
An03g06510	ZnCys	unnamed protein product	<i>arg81</i>	Regulates transcription of arginine-responsive genes
An14g07040	ZnCys	Zn(II)2Cys6 transcription factor	<i>upc2</i>	Regulates transcription of sterol biosynthetic genes
An04g06940	ZnCys	Transcriptional activator of proteases PrtT	<i>upc2</i>	Putative Zn(II)2Cys6 motif containing transcription factor
An04g07400	ZnCys	Putative C6 zinc finger transcription factor	<i>ume6</i>	Negatively regulates of early meiotic genes
An02g01080	ZnCys	unnamed protein product	/	/
An03g06370	ZnCys	hypothetical protein ANI_1_1544034	/	/
An15g07070	Lambda	cyanate hydratase	/	/
An14g05840	WING	unnamed protein product	/	/

Table S2. All primers used in this study.

Primer name	Primer sequence (5'-3')
An08g06800-F	GATCAAGACCGCAGCCATCTCC
An08g06800-R	TCGCCTTCAGAATGTCCTCAATGC
An14g06010-F	CTGAAGGTGTTGGAGCGGTTGG
An14g06010-R	CCTTGGTGAGCGGGATGACATATTC
An15g02460-F	TTCTGTGATCGTGGAGACACTGTTG
An15g02460-R	ACATCAGGTCGCAAGCCATTCTG
<i>qgpdA</i> -F	GGCTTCGGTCGTATCGGA
<i>qgpdA</i> -R	GTAGGCAGCATAGTGGGTC
<i>pks</i> -F	GCTTCCAATCAGTCCGTCCAGTC
<i>pks</i> -R	TCCTCTCCATCTGTATCCGCTGTAG
<i>p450</i> -F	AGAGTTGGTGAGTCGGGCTTCC
<i>p450</i> -R	TGTCATAGTATGGGCGGTAGTCTCC
<i>nrps</i> -F	AGGCTGTATGCTCGTGGGAT
<i>nrps</i> -R	GCCACAGCGTTGCAGTATCT
<i>hal</i> -F	CCGGTATCTGCCAGCTGGAA
<i>hal</i> -R	GTACTTGGTGCTGGCGATGC
<i>bzip</i> -F	GGGTATCTTATCGTCGGTTGAGCTG
<i>bzip</i> -R	GTGATCTGGATGCCCTCGTGATTC
An08g08920-F	TTGTTCCAGGCGTTGCTCCATC
An08g08920-R	CGCTGGTAAGGACAGTACACTTGG
An09g00820-F	GTTCCCTCGGCGATCACGGTTAC
An09g00820-R	CCATGTTATTCCCATCCCAGGTCTG
An14g00690-F	CGAAGACGTTGCGAAGAATGTTG
An14g00690-R	ACTCGGCGGGTAGCAATTTGTG
An02g07930-F	TCAGTCGCAAATGTTACCCAGATC
An02g07930-R	GTCATTAGCCTCCGCAGTGTCTC
An08g09150-F	AGTGTCTTGCCTGGGCGAATTAC
An08g09150-R	AACCTCCTTCCGACCCGTCATC
An16g00630-F	CTTCTTCACCGCCTCCCAACTTG
An16g00630-R	CTTCACCGAATACGCCCTGGAATAG

Table S3. Sequences of *Gal4* binding sites on the predicted promoter.

OTA biosynthetic genes	Sequence		
An15g07920(<i>pks</i>)	AGG	CAGCATTCCCA	CCG
	CGG	AGTGTTATGAG	CCG
An15g07900(<i>p450</i>)	AGG	GCCTTGCGTCG	CCG
	AGG	CATTGGAACTA	CCG
	CGG	CCCGCAGCCAA	CCG
An15g07910(<i>nrps</i>)	AGG	ACCCCTGGTTCA	CCG
	CGG	GCGATGTCATCA	CCG
	CGG	GTACACCAGCTA	CCG
An15g07880(<i>hal</i>)	CGG	TTGGCTGCGGG	CCG
An15g07890(<i>bzip</i>)	AGG	GTAGAGAAGG	CCG
	AGG	CGCGTGCAAG	CCG
	CGG	AGCGGAGGAAGC	CCG
	CGG	CCGCGATACA	CCG
	CGG	TAGCTGGTGTAC	CCG
	CGG	TGATGACATCGC	CCG
	CGG	CTTCTTTTA	CCG

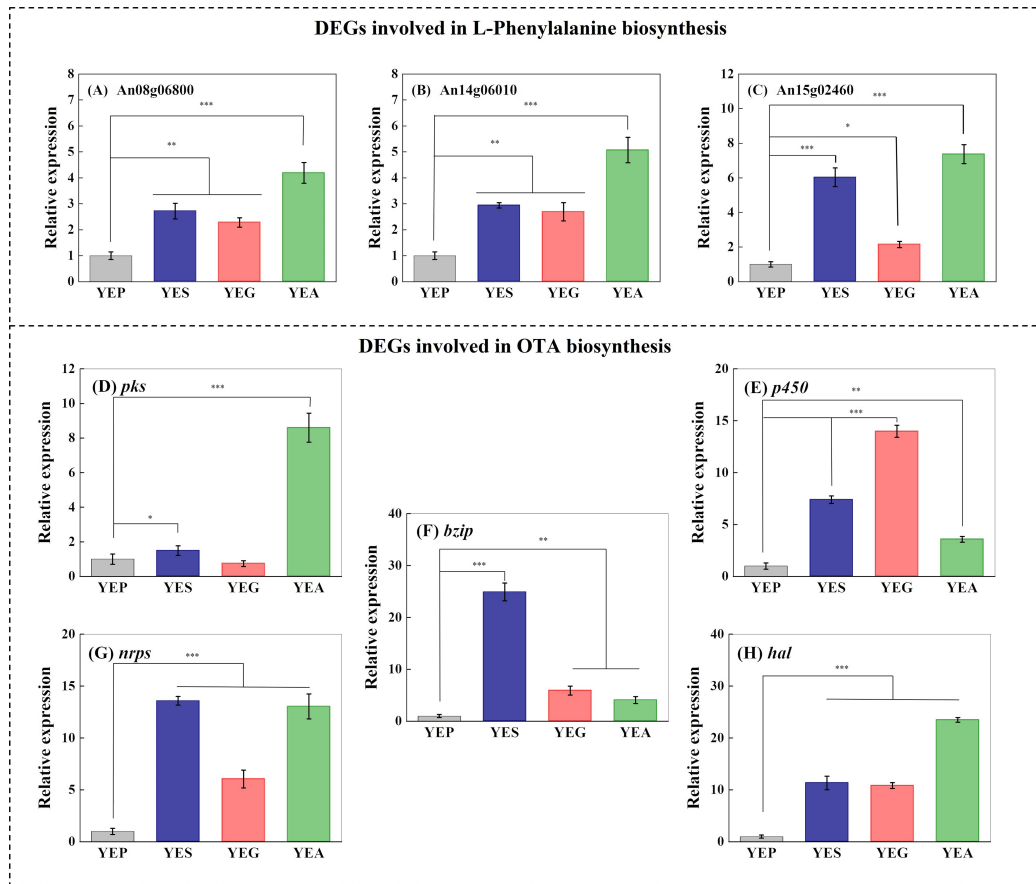


Figure S1. qRT-PCR analyses of differentially expressed genes in OTA precursor phenylalanine and OTA biosynthesis in the presence of three OTA-inducing carbon sources. * $t < 0.05$, ** $t < 0.01$, *** $t < 0.001$.